

## RAVALLI COUNTY AIRPORT WETLAND DELINEATION REPORT

February 2005

Prepared For

Ravalli County Commissioners 215 South 4<sup>th</sup> Street, Suite C Hamilton, Montana 59840

Prepared By

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#### **EXECUTIVE SUMMARY**

At the request of Ravalli County Commissioners, an investigation area within and adjacent to the Ravalli County Airport property, from Golf Course Road to approximately 1,200 feet north of Stock Farm Road, was examined for the presence and extent of wetlands and waterways by Morrison-Maierle, Inc. (MMI) in September 2003 and October of 2004. This wetland delineation has been completed to address potential impacts to wetlands that could occur as a result of expansion of the existing airport facilities.

The Ravalli County Airport is located in portions of Sections 20, 29, and 32, Township 6 North, Range 20 West, Ravalli County, Montana approximately 1 mile east of Hamilton, Montana. The investigation area comprises 1) an approximately 1,800-foot-wide corridor extending from the Golf Course Road north to Tammany Lane, 2) an approximate 1,000-foot-wide corridor east of the existing runway, 3) the airport property west and adjacent to the existing airport structures, 4) the gun range and gravel pit, and 5) an approximately 1,320-foot-wide by 4,320-foot-long area north of the existing runway that extends approximately 1,200 feet north of Stock Farm Road. The preferred construction alternative for the airport expansion identified in the Ravalli County Airport Layout Plan includes construction of a proposed new runway approximately 400 feet to the east of the existing runway, and it is anticipated that all impacts from runway construction will occur within the investigation area (MMI 2003). Therefore, all wetlands and waterways occurring within the investigation area were delineated.

Two separate delineations occurred within the investigation area. The 2003 delineation effort identified fourteen wetlands, but did not examine the entire proposed project impact area identified in the Ravalli County Airport Layout Plan. The purpose of the 2004 delineation was to extend the boundaries of wetlands previously delineated in 2003 to the project impact area boundary and to delineate any wetlands that occur within the investigation area that were not identified in 2003. Six wetland boundaries were extended in 2004 from the previous delineation to the project impact boundary, and four additional wetlands were delineated in 2004. The wetlands that were delineated during both field efforts are identified in Exhibit A.

A total of eighteen wetlands were identified within the Ravalli County Airport investigation area. Utilizing the Hydrogeomorphic Classification System, nine of the wetlands were classified as riverine and nine wetlands were classified as depressional. Two of the nine depressional wetlands appear to be non-jurisdictional. These two wetlands did not connect nor were they adjacent to a known waters of the U.S. All but one of the riverine wetlands delineated appeared to be jurisdictional. Final jurisdictional status and verification of delineated wetland boundaries for all wetlands located within the project area will be provided by the U.S. Army Corps of Engineers. Approximately 45.97 acres of wetland occurs within the investigation area.

#### 1.0 INTRODUCTION

At the request of Ravalli County Commissioners, an investigation area within and adjacent to the Ravalli County Airport property, from Golf Course Road to approximately 1,200 feet north of Stock Farm Road, was examined for the presence and extent of wetlands and waterways by Morrison-Maierle, Inc. (MMI) in September 2003 and October of 2004. The Ravalli County Airport is located in portions of Sections 20, 29, and 32, Township 6 North, Range 20 West, Ravalli County, Montana approximately 1 mile east of Hamilton, Montana. The investigation area comprises 1) an approximately 1,800-foot-wide corridor extending from Golf Course Road north to Tammany Lane, 2) an approximate 1,000-foot-wide corridor east of the existing runway, 3) the airport property west and adjacent to the existing airport structures, 4) the gun range and gravel pit, and 5) an approximately 1,320-foot-wide by 4,320-foot-long area north of the existing runway that extends approximately 1,200 feet north of Stock Farm Road. The site location and specific area of investigation are provided in Figure 1.

Construction of a new runway parallel and approximately 400 feet to the east of the existing runway is the preferred alternative for the proposed airport expansion identified in the Ravalli County Airport Layout Plan (MMI 2003). This proposed alternative would convert the existing runway into the parallel taxiway and a new 75-foot-wide runway would be constructed. The newly proposed runway would be constructed in an area that is currently undeveloped pasture used for grazing, and it is anticipated that all impacts from runway construction will occur within the investigation area. Therefore, all wetlands and waterways occurring within the proposed project development corridor were delineated. The property adjacent to the airport is low-density residential and cultivated agriculture fields. The areas identified by MMI that were determined to exhibit positive indicators for hydrophytic vegetation, wetland hydrology, and hydric soils were delineated as wetland and are described in detail in the following sections.

Two separate delineations occurred within the investigation area. The 2003 delineation effort identified fourteen wetlands, but did not examine the entire proposed project impact area identified in the Ravalli County Airport Layout Plan. The purpose of the 2004 delineation was to extend the boundaries of wetlands previously delineated in 2003 to the project impact area boundary and to delineate any wetlands that occur within the investigation area that were not identified in 2003. Six wetland boundaries were extended in 2004 from the previous delineation to the project impact boundary, and four additional wetlands were delineated in 2004. The wetlands that were delineated during both field efforts are identified in Exhibit A.

#### 2.0 OBJECTIVES

The purpose of this study was to locate areas that meet the criteria for wetlands and non-wetland waterways within the specified investigation area within and adjacent to the Ravalli County Airport property, delineate their boundaries, and provide the results in a final report. A second objective was to provide observations as to the likely jurisdictional status of the delineated wetlands and non-wetland waterways based on their connection or adjacency to a known waters of the U.S.

The jurisdictional observations made during the course of the delineation effort are considered preliminary and are based on conditions observed in the field and/or during the off-site review, as well as interpretation of current guidelines. Final jurisdictional status will require concurrence from the U.S. Army Corps of Engineers (USACE). Jurisdictional determination criteria are discussed in more detail in Section 3.2.3.

#### 3.0 METHODS

The wetland delineation for this project was based on the methodology developed by the USACE and other federal agencies, for implementation of Section 404 of the Clean Water Act. The investigation consisted of an off-site review of existing site-specific information and completion of an on-site inspection using the Routine Level 2 Determination Method outlined in the 1987 USACE Wetlands Delineation Manual (Environmental Laboratory 1987).

#### 3.1 OFF-SITE REVIEW

A preliminary off-site review was completed to identify potential wetland areas and non-wetland waterways within the project corridor. The source documents used for this review included the U.S. Geological Survey (USGS) Mountain House (1964), Hamilton North (1967), Hamilton South (1964), and Corvallis (1967) 7.5' Topographic Maps, the applicable portion of these maps are provided as Figure 1; the aerial photograph of the project corridor (MMI 1999), provided as Figure 2; the Ravalli County Soil Survey Map (USDA 1959), provided as Figure 3; and the National Wetlands Inventory (NWI) Map, provided as Figure 4.

#### 3.2 ON-SITE REVIEW

Wetlands were identified on-site (using the Level 2 Routine Wetland Determination Method) as areas that met the standard criteria for hydrophytic vegetation, hydric soils, and wetland hydrology. The wetland criteria for each of the above three parameters is discussed in greater detail in Section 3.2.1. Using this method, these three parameters were evaluated at sample points (S) along linear transects to determine the boundary between upland and wetland areas. If a sample point exhibited positive wetland indicators for all three parameters, a positive wetland determination is made for the area represented by the sample point. If any sample point failed to exhibit a positive indicator for one or more parameters, the area is determined to be non-wetland per the 1987 USACE Wetland Delineation Manual. The areas that were determined to be wetland (W) that occurred within the project corridor were marked with pin flags, surveyed, and mapped. The locations of all delineated wetlands are provided on the Wetland Delineation Map included as Exhibit A. Two separate delineations occurred within the investigation area. The 2003 delineation effort identified fourteen wetlands, but did not examine the entire proposed project impact area identified in the Ravalli County Airport Layout Plan. These wetlands delineated in 2003 are identified on Exhibit A and in this report as "03" wetlands. The purpose of the 2004 delineation was to extend the boundaries of wetlands previously delineated in 2003 to the project impact area boundary and to delineate any wetlands that occur within the investigation area that were not identified in 2003. Six wetland boundaries were extended in 2004 from the previous delineation to the project impact boundary, and four addition wetlands were delineated in 2004. These wetlands are labeled as "04" wetlands. Many of the wetland boundaries extended beyond the project corridor. Where wetlands extended beyond the investigation area, an arrow has been provided on the Wetland Delineation Map, showing the location and the direction in which the wetland continues.

## 3.2.1 Hydrophytic Vegetation, Hydric Soils, and Wetland Hydrology

The following is a discussion of the wetland indicators for each of the three parameters (vegetation, soils, and hydrology) examined in the field when utilizing the Level 2 Routine Wetland Determination Method. Under most circumstances, a positive wetland indicator must be identified for each of the three parameters in order for an area to be determined to be wetland.

#### Hydrophytic Vegetation

Plants must be physiologically or morphologically adapted for life under saturated or anaerobic soil conditions to grow in wetlands. The USACE and the U.S. Fish and Wildlife Service (USFWS) have determined the estimated probability of each plant species occurrence in wetlands and have assigned an "indicator" status to each species to reflect their findings. Accordingly, plants may be categorized as obligate (OBL), facultative wetland (FACW), facultative (FAC), facultative upland (FACU), upland (UPL), and no indicator assigned (NI). Species with an indicator status of OBL, FACW, or FAC are considered adapted for life in saturated or anaerobic soil conditions. A sample plot is considered to meet the hydrophytic vegetation criterion if more than 50 percent of dominant species present have an indicator status of OBL, FACW, or FAC.

#### Hydric Soils

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile (Environmental Laboratory 1987). Soil is saturated when all voids (pores) between soil particles are filled with water.

Hydric soils exhibit certain physical characteristics that can be observed in the field. These characteristics, or indicators, include high organic content, accumulation of sulfides, greenish or bluish gray color (gley formation), mottling, and dark soil colors (low soil chroma). Organic content is estimated visually and texturally, sulfidic material is determined by the odor of sulfide gases, and soil colors are determined by using *Munsell Soil Color Charts* (Munsell Color 2000). A sample plot is considered to meet the hydric soil criterion if one or more of the above indicators or other hydric soil indicators as specified in the 1987 USACE Wetlands Delineation Manual are present.

#### Wetland Hydrology

The technical guidelines for the wetland hydrology parameter have been established as soils that are periodically inundated or saturated to the surface at some time during the growing season (Environmental Laboratory 1987). Wetland hydrology may be supplied by surface water, groundwater, and/or direct precipitation. Sites are examined for visual indicators of wetland hydrology such as current ponding or soil saturation, previous inundation or saturation, and observable drainage patterns. A sample plot is considered to meet the wetland hydrology criterion if at least one primary indicator or two secondary indicators are present.

#### 3.2.2 Non-Wetland Waterways

Non-wetland waterways are identified as having either perennial or intermittent flow as evidenced by the presence of a defined channel with bed and bank or a streambed dominated by hydrophytic vegetation. These non-wetland waterways may be considered isolated or jurisdictional depending on adjacency to or the existence of a surface hydrologic connection to a known waters of the U.S.

#### 3.2.3 Jurisdictional Determination

The observed jurisdictional status of wetlands and non-wetland waterways was determined through visual documentation of a surface hydrological connection to a known waters of the U.S. Final jurisdictional status for all wetlands and waterways located within the project area will be provided by the USACE.

#### 3.2.4 Data Collection

Vegetation, soils, and hydrology were documented at representative locations along the wetland-upland boundary. Data were recorded for at least one sample point on both the upland and wetland sides of the wetland boundary along a linear transect. Copies of USACE data sheets are provided in Appendix A. Sample points were documented and representative photographs of the project area were taken. The following is the sampling, data collection, and data recording methodology for each of the three wetland parameters (vegetation, soils, and hydrology) as well as for sample point documentation.

#### Vegetation Data

At each sample point, plant species dominance was estimated based on the percent areal or basal coverage within a 30-foot radius for the tree and shrub layers and a 10-foot radius for the herbaceous layer within the community type being sampled. Plants were identified using standard regional plant keys. Taxonomy was based on Vascular Plants of Montana (Dorn 1984). Indicator status of plant species was taken from the National List of Plant Species That Occur in Wetlands for Region 9-Northwest (Resource Management Group 1993) and the 1993 Supplement to the List of Plant Species that Occur in Wetlands: Northwest (Region 9) (Reed 1993).

#### Soil Data

At each sample point soils were characterized to a minimum depth of 16 inches when possible. At times, excessively rocky soils may prevent this depth of excavation. Munsell Soil Color Charts and standard soil texturing methodology were used to describe the soil profile.

#### Hydrology Data

At each sample point, hydrology was typically determined based on factors such as depth to free water in soil test pits, inundation, soil saturation in the upper 12 inches, or observable drainage patterns within the wetland.

#### Photo and Sample Data Point Documentation

Sample points were marked in the field with pin flags. Each sample point was then assigned a number that corresponded to the wetland being documented, and this number was written on the sample point flags. Sample points were then surveyed. Representative photographs of the wetland and associated upland areas were taken with the location and a description of the scene recorded on a field photo log sheet. Copies of digital photographs are provided in Appendix B.

#### 3.3 WETLAND CLASSIFICATION

Wetlands were classified using the Hydrogeomorphic (HGM) classification system. This system classifies Montana wetlands as riverine, slope, depressional, mud flats, or lacustrine (Smith 1995). A brief description of each wetland type is presented below.

- Riverine wetlands include wetlands associated with waterway/drainage systems. These
  can be perennial or intermittent streams or rivers and/or their immediately adjacent
  wetlands.
- Slope wetlands include wetlands that are typically associated with groundwater seepage. This seepage usually persists and saturates the soil throughout the growing season but typically does not form a defined channel. Seepage slopes may convey water to a waters of the U.S. and therefore, would be considered jurisdictional. However, water in these wetlands may influence only a limited area and are often isolated and therefore, would be considered non-jurisdictional.
- Depressional wetlands include wetlands that typically form in isolated depressions such
  as glacial potholes. Hydrology for these wetlands may either be supplied by groundwater
  seepage or surface water from the surrounding watershed. Typically, these wetlands have
  no definable inlet or outlet.
- Mud flats include both mineral flats such as playas and organic flats such as expansive peat lands.
- Lacustrine wetlands include both wetlands immediately adjacent to large water bodies as well as the water body itself. In order to qualify as a lacustrine wetland, the water body must exceed 2 meters in depth, or the wetland is classified as depressional.

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#### 3.4 PERENNIAL DRAINAGES

Perennial drainages, or streams, flow continuously and they are generally fed in part by springs. Surface water elevations are commonly lower than the water table elevation in adjacent soils (Hansen et al. 1995). Existing data, such as USGS topographic maps and Natural Resource Conservation Service (NRCS) soil survey maps, were reviewed to identify documented perennial drainages.

#### 4.0 RESULTS

The wetland delineation completed by MMI consisted of reviewing existing site-specific information and completing an on-site inspection with sampling using the Level 2 Routine Determination Method outlined in the 1987 USACE Wetlands Delineation Manual. The delineation effort consisted of a preliminary off-site investigation of available information and an on-site investigation that consisted of two separate pedestrian surveys of the investigation area and delineation of individual wetlands and waterways. A total of eighteen wetlands were identified within the Ravalli County Airport project area.

#### 4.1 OFF-SITE REVIEW

A preliminary off-site review was completed of the USGS Mountain House, Hamilton North, Hamilton South, and Corvallis 7.5' Topographic Maps, provided as Figure 1; an aerial photograph of the project site, provided as Figure 2, the Soil Survey of Ravalli County, Montana, provided as Figure 3; and the National Wetlands Inventory Map of the area, provided as Figure 4.

#### 4.1.1 USGS Topographic Map

The Mountain House (1964), Hamilton North (1967), Hamilton South (1964), and Corvallis (1967), Montana USGS 7.5' Topographic Maps show residential areas to the southwest of the Ravalli County Airport with Gird Creek, Hedge Ditch, and one unnamed drainage crossing the airport property within the investigation area. The unnamed western most drainage was delineated as W-1-03 and W-2-03, and continues off the property as W-12-03. This drainage appears to be a lateral of the Hedge Ditch. The northern most drainage is Gird Creek, and its fringe wetland was delineated as W-4-03/W-4-04. The southern most drainage within the investigation area is identified on the topographic map as Hedge Ditch, a lateral of Gird Creek, which was delineated as W-15-04. Other features evident in the topographic map are the airport runway and structures, and the gravel pit near the entrance to the airport at the turn off from the East Side Highway. The topographic maps indicate relatively flat topography throughout the investigation area and the lack of dense vegetation.

## 4.1.2 Aerial Photograph

The aerial photograph of the project site shows that the majority of the site is open agricultural land with low-density residential areas to the southwest of the Ravalli County Airport property (MMI 1999). Several drainages are evident on the photograph identified by dark linear areas and were delineated as W-1-03/W-1-04, W-2-03, W-3-03, W-4-03/W-4-04, W-8-03/W-8-04, W-11-03, W-12-03, and W-15-04. Other areas with dark shading that appear on the photograph were delineated as depressional wetlands W-5-03, W-6-03/W-6-04, W-7-03/W-7-04, W-9-03, W-10-03, W-13-03, W-16-04, and W-18-04. Dry drainages are visible on the aerial photograph to the east of the existing runway and are depicted by dark linear areas. On-site review concluded that these areas did not contain wetland vegetation or defined bed and bank. Therefore, these drainages were not delineated as wetlands.

#### 4.1.3 Soil Survey Map

According to the Soil Survey of Ravalli County, Montana, four soil map units (representing those areas where sample points were located within delineated wetlands) occur within the investigation area boundary that contain hydric soil components. The map unit Corvallis silt loam, poorly drained variant (C3r), 0 to 2 percent slopes, contains 90 percent of the Corvallis poorly drained variant component, which is a hydric soil. The map unit Corvallis silt loam, slightly saline (C3s), 0 to 2 percent slopes, contains 10 percent of the poorly drained soils component, which is a hydric soil. The map unit Corvallis silt loam, moderately saline (C3t), 0 to 2 percent slopes, contains 5 percent of the poorly drained soils component, which is a hydric soil. The map unit Corvallis silt loam, moderately shallow, slightly saline (C3v), 0 to 2 percent slopes, contains 5 percent of the poorly drained soils component, which is a hydric soil.

The non-hydric soil map units that occur within the investigation area boundary which represent those areas where sample points were located within delineated wetlands include: Burnt Fork loam (B3f), 0 to 2 percent slopes; Granstsdale loam (G2n), 0 to 2 percent slopes; Riverside cobbly sandy loam (Rm), 2 to 5 percent slopes; and Slocum loam (S2k), 0 to 2 percent slopes. Wetlands were delineated in areas designated on the Soil Survey Map of Ravalli County as having both hydric and non-hydric soils. A list of all hydric and non-hydric soil map units located within the proposed project corridor that represent sample point locations are provided in Table 4.1. The NRCS is currently updating soils information for the Bitterroot Valley; soil data for this area may be updated as a result of the new survey.

Table 4.1 Soil map units occurring within the project investigation area at sample points.

Map Unit Symbol	Map Unit Name	Percent Slope
C3r	Corvallis silt loam, poorly drained variant	0 to 2
C3s	Corvallis silt loam, slightly saline	0 to 2
C3t	Corvallis silt loam, moderately saline	0 to 2
C3v	Corvallis silt loam, moderately shallow, slightly saline	0 to 2
B3f	Burnt Fork loam, level	0 to 2
G2n	Grantsdale loam, level	0 to 2
Rm	Riverside cobbly sandy loam, sloping	2 to 5
S2k	Slocum loam, slightly saline	0 to 2

#### 4.1.4 National Wetlands Inventory Map

The NWI Map indicates two wetlands present within project area. The two mapped wetlands are illustrated on Figure 4. A palustrine, emergent, temporarily flooded wetland occurs north and east of the existing runway and is the fringe wetland associated with Gird Creek that was delineated as W-4-03. The other wetland occurring in the project area identified by the NWI Map is a palustrine, emergent, seasonally flooded wetland, diked/impounded wetland. This wetland was delineated as W-13-03.

#### 4.2 ON-SITE REVIEW

A total of eighteen wetland area and waterways were identified and delineated within the investigation area (Exhibit A). Two separate delineation efforts took place, one in September of 2003, and one in October of 2004. The wetland delineation boundaries provided on Exhibit A are labeled to correspond to the date of the field investigation. Several wetland boundaries were extended in 2004 from the mapping of the 2003 delineation. Utilizing the HGM classification system, nine wetlands were classified as riverine and nine were classified as depressional. Descriptions of the wetlands as well as their potential jurisdictional status are provided below.

#### 4.2.1 Riverine Wetlands

Riverine wetlands include waterways or drainage systems along with their immediately adjacent wetlands. Nine riverine wetlands were delineated within the project site including wetlands W-1-03/W-1-04, W-2-03, W-3-03, W-4-03/W-4-04, W-8-03/W-8-04, W-11-04, W-12-03, W-14-03, and W-15-04. One stream, Gird Creek, located approximately 200 feet north of the existing runway along the base of a topographic bench was identified during this review. The riverine fringe wetland and depressional wetland meadow associated with Gird Creek were delineated as W-4-03/W-4-04. Wetland W-1-03/W-1-04 is a typical riverine wetland within the project area that will be described below.

Wetland W-1-03/W-1-04 is located within the southern portion of the investigative area south of Tammany Lane and flows north and connects to W-2-03 across Tammany Lane via culvert. Wetland W-1-03/W-1-04 was observed to be a jurisdictional water of the U.S., due to the existence of a surface hydrologic connection to the Bitterroot River. The dominant wetland vegetation included Nebraska sedge (Carex nebrascensis, OBL), common monkey flower (Mimulus guttatus, OBL), tufted hairgrass (Deschampsia cespitosa, FACW), hairy willowherb (Epilobium cilliatum, FACW-), reed canarygrass (Phalaris arundinacea, FACW), American mannagrass (Glyceria grandis, No status), and curly dock (Rumex crispus, FAC+). Hydrology indicators included saturated soils in the upper 12 inches, drainage pattern in the wetland, and the FAC-Neutral Test. The hydric soil was a low chroma color (10YR 2/1). The wetland/upland boundary followed a change in vegetation from Nebraska sedge, common monkey flower, tufted hairgrass, hairy willowherb, reed canarygrass, American mannagrass, and curly dock in the wetland to slender wheatgrass (Agropyron trachycaulum, FAC), prickly lettuce (Lactuca serriola, FACU), common tansy (Tanacetum vulgare, NI), and alfalfa (Medicago sativa, No status) in the upland.

#### 4.2.2 Depressional Wetlands

Depressional wetlands include wetlands that typically form in topographic depressions and other low-lying areas. Hydrology for these wetlands may either be supplied by groundwater seepage, surface water from the surrounding watershed, or a combination of the two. Nine wetlands were classified as depressional. Two of the nine depressional wetlands, W-13-03 and W-16-04, appeared to be isolated and are likely to be non-jurisdictional. Seven depressional wetlands, W-5-03, W-6-03/W-6-04, W-7-03/W-7-04, W-9-03, W-10-03/W-10-04, W-17-04, and W-18-04 appeared to connect with W-4-03/W-4-04, the fringe wetland associated with Gird Creek and are likely jurisdictional.

Wetland W-6-03 is a typical depressional wetland within the project area. This wetland is located east of the existing runway area and exhibits a hydrological connection to W-3-03 (a riverine ditch) that eventually connects to W-4-03/W-4-04 the fringe wetland associated with Gird Creek. The dominant wetland vegetation included Nebraska sedge, tufted hairgrass, curly dock, Baltic rush (*Juncus balticus*, FACW+), reed canarygrass, and smooth scouring-rush (*Equisetum laevigatum*, FACW). The hydrology indicators included drainage patterns in the wetland and the FAC-Neutral Test. The hydric soil was a low chroma color (10YR 3/1). The wetland/upland boundary followed a change in vegetation from Nebraska sedge, tufted hairgrass, curly dock, Baltic rush, reed canarygrass, and smooth scouring-rush in the wetland to snowberry (*Symphoricarpos albus*, FACU), Woods rose (*Rosa woodsii*, FACU), and musk thistle (*Carduus nutans*, No status) in the upland.

Table 4.2 provides a list of the delineated wetlands and their wetland type as well as the observed preliminary jurisdictional status. Final jurisdictional status on all wetlands will be provided by the USACE. Wetlands with the same wetland number but with both an "03" and "04" extension were extended during the 2004 delineation field investigation.

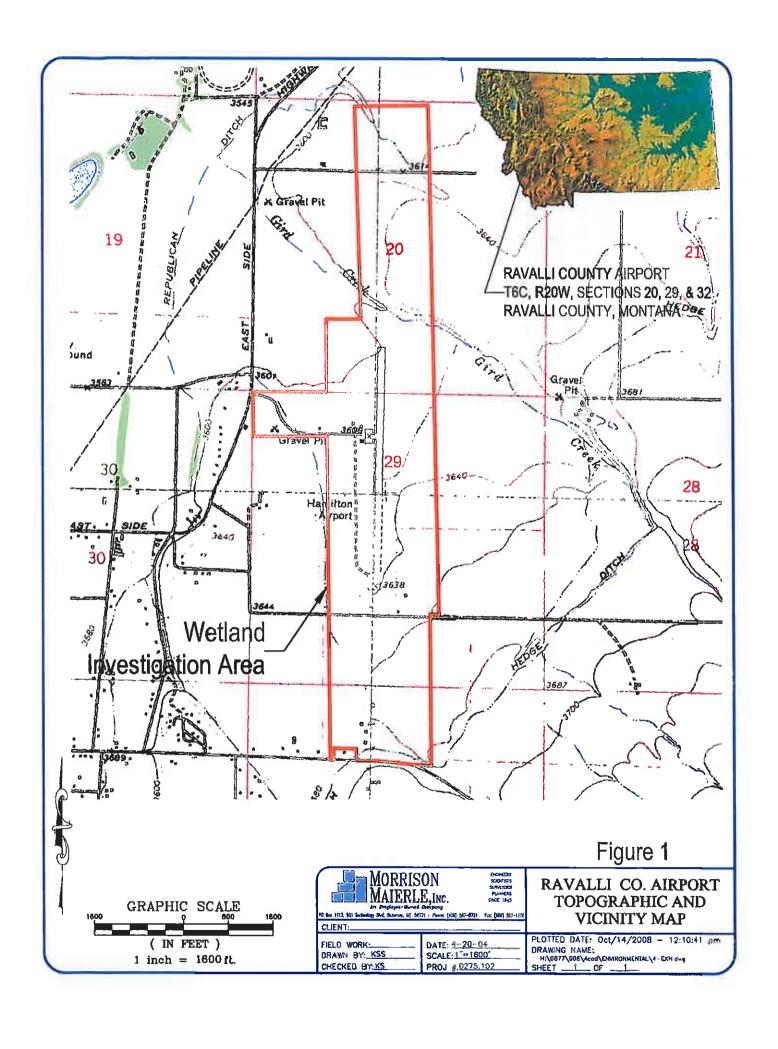
Table 4.2 Wetland Information

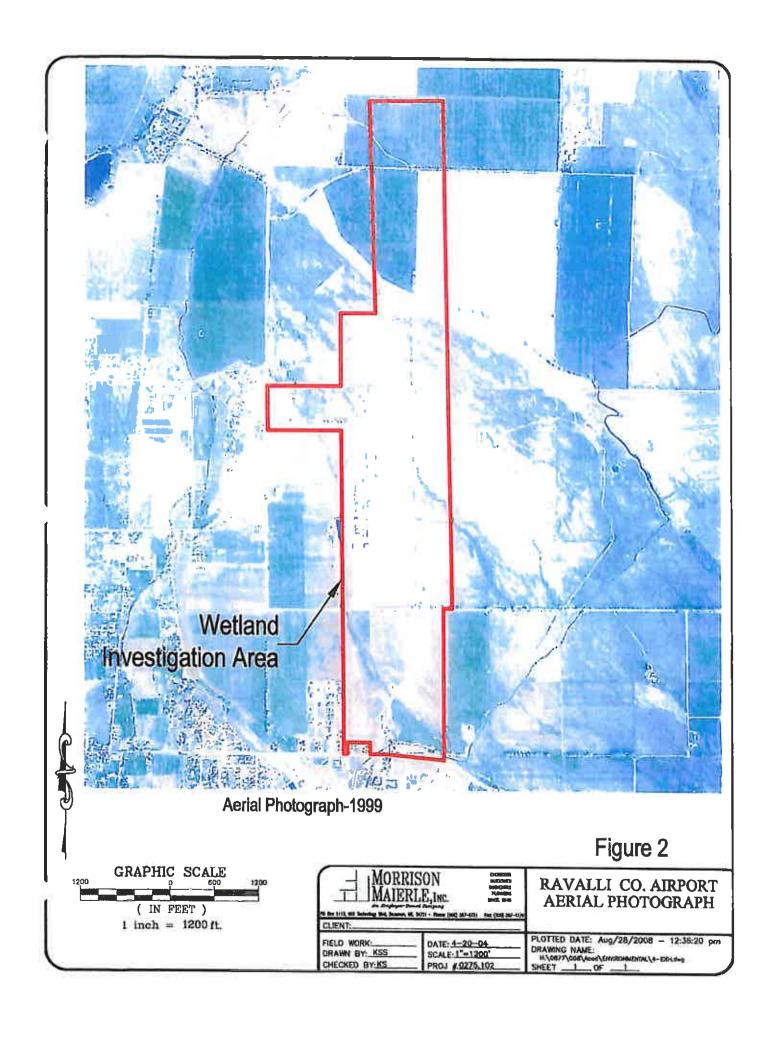
WETLAND	WETLAND TYPE	OBSERVED PRELIMINARY JURISDICTIONAL STATUS	ACRES
W-1-03/	Riverine	Yes	5.36
W-1-04			
W-2-03	Riverine	Yes	6.26
W-3-03	Riverine	Yes	1.38
W-4-03/	Riverine	Yes	18.90
W-4-04			
W-5-03	Depressional	Yes	0.05
W-6-03/	Depressional	Yes	0.69
W-6-04			
W-7-03/	Depressional	Yes	0.37
W-7-04			
W-8-03/	Riverine	Yes	0.36
W-8-04			
W-9-03	Depressional	Yes	0.10
W-10-03/	Depressional	Yes	9.37
W-10-04			<u>L</u>
W-11-03	Riverine	Yes	0.12
W-12-03	Riverine	Yes	1.31
W-13-03	Depressional	No	0.33
W-14-03	Riverine	No	0.13
W15-04	Riverine	Yes	0.83
W-16-04	Depressional	No	0.10
W-17-04	Depressional	Yes	0.07
W-18-04	Depressional	Yes	0.24

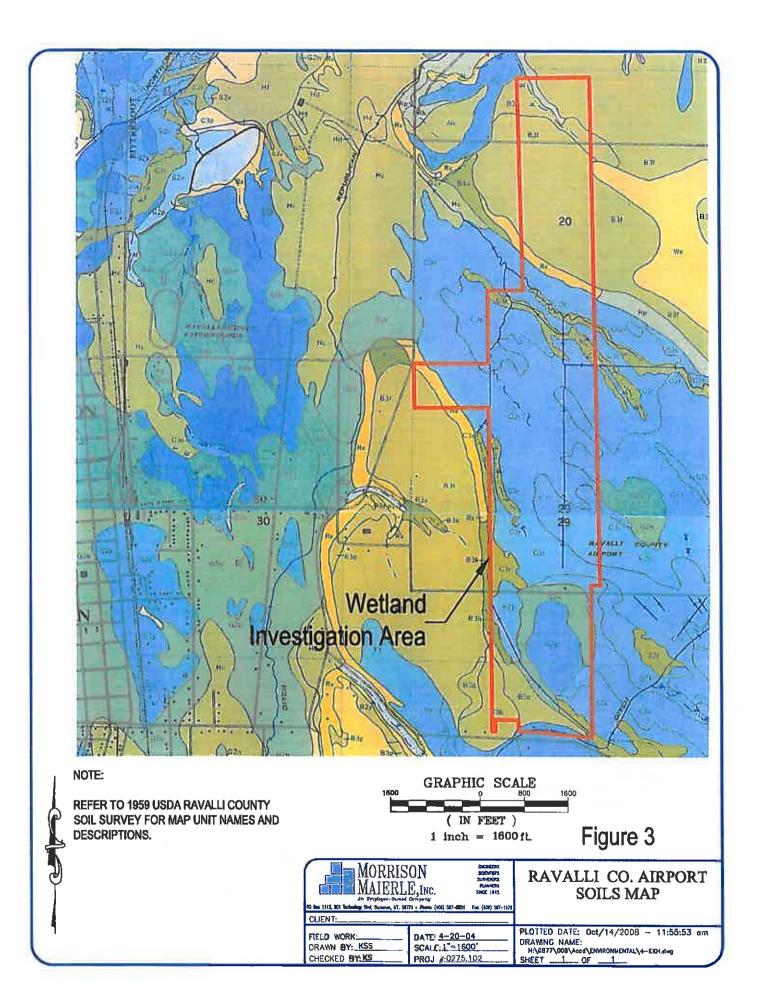
TOTAL ACRES 45.97

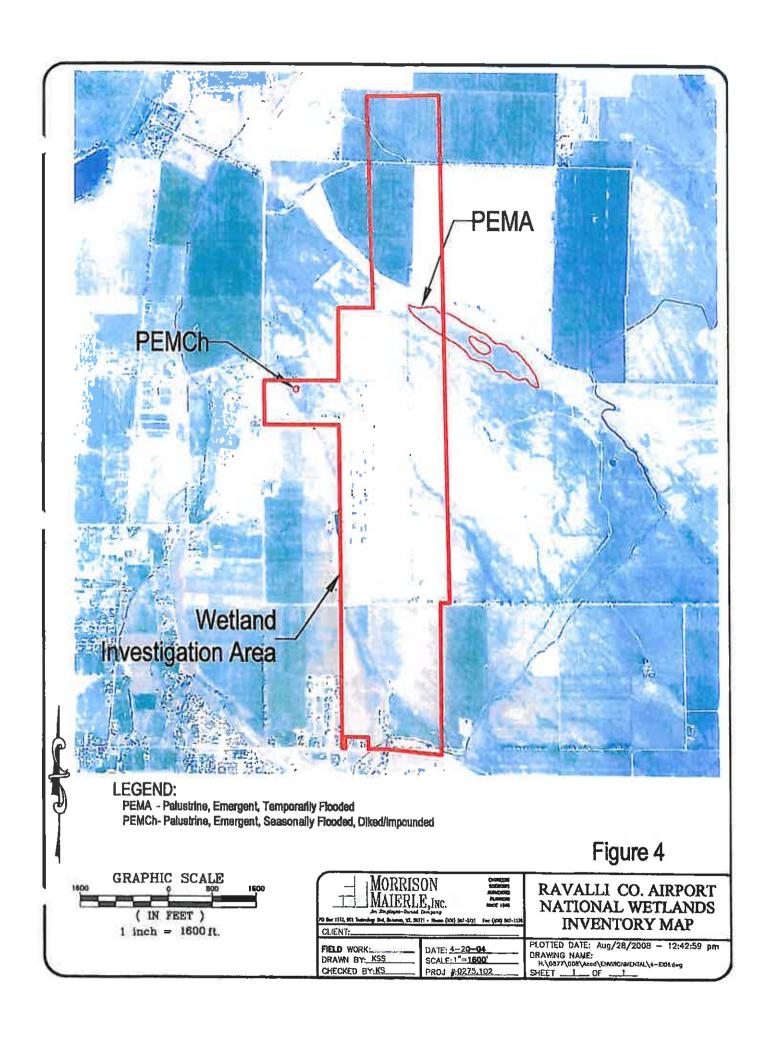
## 5.0 REFERENCES

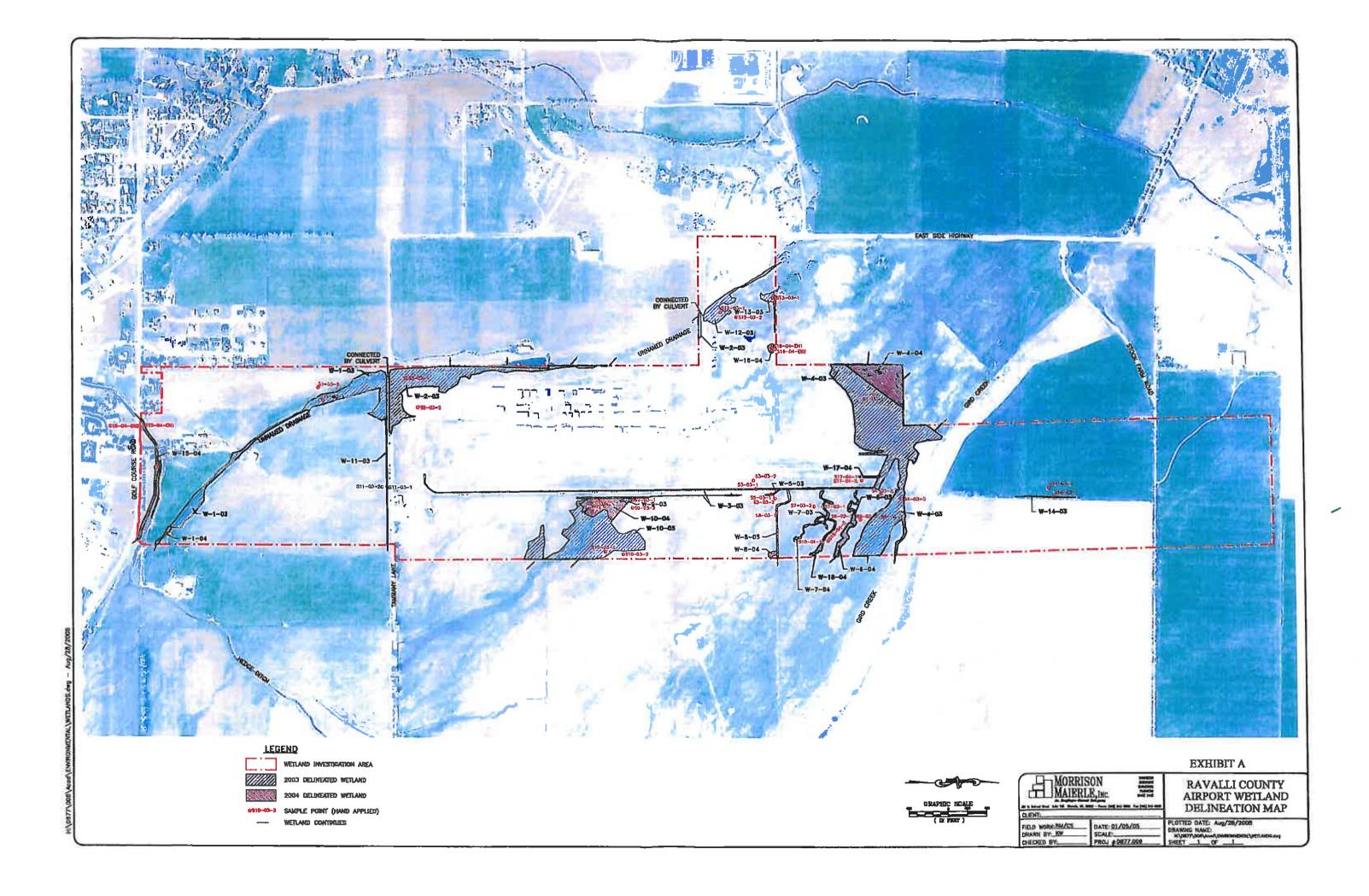
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# APPENDIX A USACE Data Sheets

Data Form		City: Hamilton	
Routine Wetland Determination		Wetland Data Point W-1-03-wi.	
Project/Sile: Ravalli Co. Airport		Date: October 28, 2004	
Applicant/Owner: Ravalli County		County: Ravalli	
Investigator: SR/EN		State: MT	
[X] Do normal circumstances exist on the site?		Community ID: Wetland	
[ ] Have vegetation, soils, or hydrology been dis-	lurbed?	Station ID: \$-1-03	
[ ] Is the area a potential problem area?		Piot ID: 1	
Vegetation		FIGURE 1	
Dominant Species	Common Name	% Cover Indicator	
<u>Herbaceous</u>		The state of the s	
Juncus ensifolius	Rush,Three-Stamen	FACW	
Cirsium arvense	Thistle, Creeping	FACU+	
Geranium richardsonii Rumex crispus	Crane's-Bill,Richardson's	FAC-	
Glyceria grandis	Dock,Curly Grass,American Manna	FAC+	
Phalaris arundinacea	Grass, Reed Canary	No status	
Epilobium ciliatum	Willow-Herb, Hairy	FACW FACW-	
Descham <b>psia cespitosa</b>	Hairgrass, Tufted	FACW	
Mimulus guttatus	Monkey-Flower, Common La	rge OBL	
Carex nebrascensis	Sedge, Nebraska	OBL	
Phleum pratense	Timothy	FAC-	
% Species that are OBL, FACW, or FAC (except Remarks: Greater than 50% FAC or wetter	FAC-): C	owardin Classification:	
Usalua La gra			
Hydrology	Primary Welland Hydrology Indicate	ors Secondary Hydrology Indicators	
[ ] Recorded Data (describe in remarks)	[ ] Inundated	[ ] Oxidized root channels	
[ ] Stream, Lake, or Tide Gage	(X) Saturated in upper 12 inches		
[ ] Aerial Pholograph	[ ] Water marks	[ ] Local soil survey dala	
[ ] Other (describe in remarks)	[ ] Drift lines	[X] FAC-Neutral test	
t 1 · · · · · · · · · · · · · · · ·	[ ] Sediment deposits	- •	
Field Observations:		[ ] Other (explain in remarks)	
Depth of Surface Water(in.): 0	[X] Drainage patterns in welland	18	
Depth to Free Water in Pit(in.): >16			
Depth to Saturated Soils(In.): 0			
Remarks			
Soils			
Depth Hor. Matrix Mottle / 2nd & Color Color		exture,	
0-12 A 10YR 3/1		Structure, etc.	
U-12 A TOTAGE		Sandy Loam Fine Subangular Blocky	
Hydric Soils Indicators	· · · · · · · · · · · · · · · · · · ·		
[ ] Histosol	[ ] Concretions		
[ ] Histic Epipedon	[ ] High Organic % in \$	Surface Laver	
[ ] Sulfidic Odor	[ ] Organic Streaking		
Probable Aquatic Moist Regime	[ ] Listed on Local Hyd	iric Solle Liet	
[ ] Reducing Conditions			
[X] Gleved or Low-Chroma Colors	[ ] Listed on National I	<del>-</del>	
	[ ] Other (explain in re	•	
Unit Name: S2k Slocum loam slightly saline	Taxonomy: Ustic Torriflu	vents	
Drainage Class: Moderately well drained	[ ] Field Observations ma	itch map	
Remarks		•	
Wetland Determination			
	[V] TL!- D-1- D-1 + +	148-11	
[X] Hydrophylic Vegetation Present	[X] This Data Point is a	i AAGIISUQ	
[X] Hydric Soils Present			
[X] Wetland Hydrology Present			
Remarks			

Data Form Routine Wetland Determination	C	lob Number: 0877.008.010.0310 City: Hamilton Vetland Data Point: W-1-03-upl.
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegetation, soils, or hydrology been disturt [ ] Is the area a potential problem area?		Date: October 28, 2004 County: RavallI State: MT Community ID: Upland Station ID: S-1-03 Plot ID: 2
Vegetation  Dominant Species	Common Name	% Cover Indicator
Herbaceous Tanacetum vulgare Lactuca serriola Medicago sativa Agropyron trachycaulum % Species that are OBL, FACW, or FAC (except FA Remarks: Less than 50% FAC or wetter	Tansy,Common Lettuce,Prickly Alfalfa Wheatgrass,Slender	NI FACU No slatus FAC vardin Classification:
Hydrology  [ ] Recorded Data (describe in remarks)  [ ] Stream, Lake, or Tide Gage  [ ] Aerial Photograph  [ ] Other (describe in remarks)  Field Observations:  Depth of Surface Water(in.): 0  Depth to Free Water in Pit(in.): >16  Depth to Saturated Soils(in.): >16  Remarks	rimary Welland Hydrology Indicators [ ] Inundated [ ] Saturated in upper 12 Inches [ ] Water marks [ ] Drift lines [ ] Sediment deposits [ ] Drainage patterns in wellands	Secondary Hydrology Indicators  [ ] Oxidized root channels  [ ] Water-stained leaves  [ ] Local soil survey data  [ ] FAC-Neutral test  [ ] Other (explain in remarks)
Soils         Mottle / 2nd Mottle (2nd Mottle)           Depth Hor. Matrix         Mottle / 2nd Mottle           (In.)         Color           0-17 A 10YR 3/3         Color	Abundance Contrast Str	xture, ucture, etc. ndy Loam Fine Subangular Blocky
Hydric Soils Indicators  [ ] Histosol [ ] Histic Epipedon [ ] Sulfidic Odor [ ] Probable Aquatic Moist Regime [ ] Reducing Conditions [ ] Gleyed or Low-Chroma Colors	[ ] Concretions [ ] High Organic % In Su [ ] Organic Streaking [ ] Listed on Local Hydri [ ] Listed on National Hy [ ] Other (explain in rem	c Soils List rdric Soils List arks)
Unit Name: S2k Stocum toam stightly saline Drainage Class: Moderately well drained	Taxonomy: Ustic Torrifluve [ ] Field Observations mate	
Remarks		
Wetland Determination  [ ] Hydrophytic Vegetation Present [ ] Hydric Soils Present [ ] Wetland Hydrology Present Remarks	[ ] This Data Point is a V	Vetland

Data Form Routine Wetland Determination		City: Hamilton Welland Dala Point: W-2-03-wl.
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegetallon, soils, or hydrology been dist [ ] Is the area a potential problem area?		Date: October 26, 2004 County: Ravalil State: MT Community ID: Wetland Station ID: S-2-03 Plot ID: 1
Vegetation		
Dominant Species Herbaceous	Common Name	% Cover_Indicator
Cirsium ervense Equisetum laevigatum Equisetum arvense Deschampsia cespitosa Phalaris erundinacea Carex nebrascensis  Shrub Salix spp.  Species that are OBL, FACW, or FAC (except	Thistie, Creeping Scouring-Rush, Smooth Horsetail, Field Halrgrass, Tufted Grass, Reed Canary Sedge, Nebraska Willow spp.	FACU+ FACW FAC FACW FACW OBL NI, OBL-FAC wardin Classification:
Remarks: Greater than 50% FAC or wetter		
Hydrology  [ ] Recorded Data (describe in remarks)  [ ] Stream, Lake, or Tide Gage  [ ] Aerial Photograph  [ ] Other (describe in remarks)  Field Observations:  Depth of Surface Water(in.): 0  Depth to Free Water in Pit(in.): >16  Depth to Saturated Soils(in.): >16  Remarks	Primary Wetland Hydrology Indicators [ ] Inundated [ ] Saturated in upper 12 inches [ ] Water marks [ ] Drift tines [ ] Sediment deposits [X] Drainage patterns in wetlands	[ ] Oxidized root channels [ ] Water-stained leaves [ ] Local soll survey data [X] FAC-Neutral test [ ] Other (explain in remarks)
Solls		
Depth         Hor.         Matrix         Mottle / 2nd M           (In.)         Color         Color           0-12         A         10YR 3/1           12-16         A         7.5YR 2.5/1	Abundance Contrast Str	xture, ructure, etc. indy Loam Fine Subangular Blocky ty Clay Coarse Subangular Blocky
Hydric Solls Indicators  [ ] Histosol [ ] Histic Eplpedon [ ] Sulfidic Odor [ ] Probable Aquatic Moist Regime [ ] Reducing Condillons [X] Gleyed or Low-Chroma Colors	[ ] Concretions [ ] High Organic % in St [ ] Organic Streaking [ ] Listed on Local Hydri [ ] Listed on National Hy [ ] Other (explain in rem	ic Solls List ydric Solls List
Unit Name: C3r Corvallis allt loam poorly dra Drainage Class: Very poorly drained	nined var. Taxonomy: Typic Haplaqu [ ] Field Observalions mate	
Remarks		
Westernal Description	<del></del>	
Wetland Determination  [X] Hydrophytic Vegetation Present  [X] Hydric Soils Present  [X] Wetland Hydrology Present	[X] This Data Point is a \	Wetland

Job Number: 0877.008.010.0310

Data Form	City: Hamilton
Routine Wetland Determination	Wetland Data Point: W-2-03-upl.
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegetation, soits, or hydrology been disturbed? [ ] Is the area a potential problem area?	Date: October 28, 2004 County: Ravalli State: MT Community ID: Upland Station ID: S-2-03 Plot ID: 2
Vegetation	
Dominant Species	Common Name % Cover Indicator
Herbaceous Tanacetum vulgare Lactuca serriola Agropyron trachycaulum Cynoglossum officinale Shrub Symphoricarpos albus % Species that are OBL, FACW, or FAC (except FAC-): Remarks: Less than 50% FAC or wetter	Tansy,Common NI Lelluce,Prickly FACU Wheatgrass,Slender FAC Houndslongue FACU Snowberry FACU Cowardin Classification:
Hydrology Prima	
[ ] Recorded Data (describe in remarks) [ [ ] Stream, Lake, or Tide Gage [ ] Aerial Photograph [ ] Other (describe in remarks) [ ]	Secondary Hydrology Indicators  ] inundated  [ ] Oxidized root channels  [ ] Water-stained leaves  [ ] Local soil survey data  [ ] FAC-Neutral test  [ ] Other (explain in remarks)  [ ] Drainage patterns in wellands
Soils	
Depth Hor. Malrix Mottle / 2nd Mollle	Texture,
(in.) <u>Color Color Ab</u> 0-14 A 10YR 3/1	Sandy Clay Loam Medium Subangular Blocky
	Oaldy Gay Loan Median Gabangala Booky
Hydric Soils Indicators  [ ] Histosol [ ] Histic Eplpedon [ ] Sulfidic Odor [ ] Probable Aquatic Moist Regime [ ] Reducing Conditions [X] Gleyed or Low-Chroma Colors  Unit Name: C3r Corvallis silt toam poorly drained of Drainage Class: Very Poorly drained	[ ] Concretions [ ] High Organic % in Surface Layer [ ] Organic Streaking [ ] Listed on Local Hydric Soils List [ ] Listed on National Hydric Soils List [ ] Other (explain in remarks)  var. Taxonomy: Typic Haplaquolis [ ] Field Observations match map
Remarks	( ) vide obstitution materials
Walland Dataming lies	
Wetland Determination	
[ ] Hydrophytic Vegetation Present [ ] Hydric Soils Present [ ] Wetland Hydrology Present	[ ] This Data Point is a Wetland

Job Number: 0877.008.010.0310

Data Form Routine Wetland Determination		City: Hamilton Wetland Data Point: W-3-03-	
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN  [X] Do normal circumstances exist on the site?  [] Have vegetation, soils, or hydrology been disturbed.  [] Is the area a potential problem area?	i?	Date: October 28, 2004 County: Revaill State: MT Community ID: Wetland Station ID: S-3-03 Plot ID: 1	ic <del>t</del> u
Vegetation			
Dominant Species  Herbaceous  Epilobium ciliatum Carex nebrascensis Phalaris arundinacea  Shrub  Salix spp.  % Species that are OBL, FACW, or FAC (except FACRemarks: Greater than 50% FAC or weller	Common Name  Willow-Herb, Hairy Sedge, Nebraska Grass, Reed Canary  Willow spp.  C	% Cover	Indicator FACW- OBL FACW NI, OBL-FAC
[ ] Recorded Data (describe in remarks) [;	nary Welland Hydrology Indical X] Inundated X] Saturated in upper 12 Inches ] Water marks ] Drift lines ] Sediment deposits ] Oralnage pattems in welfand	[ ] Oxidizad roots s [ ] Water-stained [ ] Local soll sun [X] FAC-Neutral I [ ] Other (explain	channels   leaves /ey data  est
Soils			<u> </u>
Depth Hor. Matrix Mottle / 2nd Mottle	1	Texture.	
(in.) Color Color A 0-12 A 10YR 2/1		<u>Structure, etc.</u> Sandy Clay Loam Medium Suba	ingular Blocky
Hydric Soils Indicators  [ ] Histosol [ ] Histic Epipedon [ ] Sulfidic Odor [ ] Probable Aquatic Molst Regime [ ] Reducing Conditions [X] Gleyed or Low-Chroma Colors  Unit Name: C3s Corvallis silt loam slightly saline Drainage Class: Somewhat poorly drained  Remarks	[ ] Concretions [ ] High Organic % In [ ] Organic Streaking [ ] Listed on Local Hy [ ] Listed on National [ ] Other (explain in re Taxonomy: Fluvaugentic [ ] Field Observations ma	dric Soils List Hydric Soils List emarks) c Haploborolls	
Wetland Determination			
(X) Hydrophylic Vegetallon Present (X) Hydric Soils Present (X) Wetland Hydrology Present	[X] This Data Point is a	a Wetland	

Data Form Routine Wetland Determination		Job Number: 0877.008.010.0 City: Hamilton Welland Data Point: W-3-03-	
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal dircumstances exist on the site? [ ] Have vegetation, solls, or hydrology been disturbed? [ ] Is the area a potential problem area?	· · · · · · · · · · · · · · · · · · ·	Date: October 28, 2004 County: Ravalli Slate: MT Community ID: Upland Station ID: S-3-03 Plot ID: 2	
Vegetation			
Dominant Species Herbaceous	Common Name	% Cover	Indicator
Cynoglossum officinale Centaurea maculosa Poa pratensis Cirsium ervense Dactylis glomerate Sisymbrium altissimum Carduus nutans Bouteloue gracilis Lactuca serriola Shrub Symphoricarpos albus % Species that are OBL, FACW, or FAC (except FAC-): Remarks: Less than 50% FAC or wetter	Houndstongue Knapweed, Spotted Bluegrass, Kentucky Thistle, Creeping Grass, Orchard Mustard, Tall Tumble Musk thistle Blue grama Lettuce, Prickly Snowberry	owardin Classification:	FACU No Status FAC FACU+ FACU- No status FACU
Hydrology Prime	ary Wetland Hydrology Indicato	ors Secondary Hydrolog	v Indicators
[ ] Stream, Lake, or Tide Gage [ ] Aerial Photograph [ ] Other (describe in remarks) [	] Inundated ] Saturated in upper 12 inches ] Water marks ] Drift lines ] Sediment deposits ] Drainage patterns in wetland	[ ] Local soil sun [ ] FAC-Neutral ( [ ] Other (explain	l leaves vey data est
Soils			
Depth Hor. Matrix Mottle / 2nd Mottle	bundance Contrast S	exture, Structure, etc. Sandy Clay Loam Medium Suba	angular Blocky
Hydric Solls Indicators  [ ] Histosol [ ] Histic Epipedon [ ] Sulfidic Odor [ ] Probable Aquatic Moist Regime [ ] Reducing Conditions [X] Gleyed or Low-Chroma Colors  Unit Name: C3s Corvallis sitt Ioam slightly saline	[ ] Concretions [ ] High Organic % in Section [ ] Organic Streaking [ ] Listed on Local Hydeler [ ] Listed on National I [ ] Other (explain in research)	dric Soils List Hydric Soils List marks) : Hapioborolls	
Drainage Class: Somewhat poorly drained Remarks	[ ] Field Observations ma	alch map	
Wetland Determination		·	
[ ] Hydrophytic Vegetation Present [X] Hydric Soils Present [ ] Welland Hydrology Present Remarks	[ ] This Data Point is a	a Wetland	

Data Form Routine Wetland Determination	Ci	ob Number: 0877.008.010.0310 ity: Hamilton /etland Data Point: W-4-03-wi,
Project/Sile: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegetation, soils, or hydrology been disturbed? [ ] Is the area a potential problem area?		Date: October 28, 2004 County: Ravalli State: MT Community ID: Wetland Station ID: S-4-03 Plot ID: 1-West
Vegetation		
Dominant Species	Common Name	% Cover Indicator
Herbaceous Poa palustris Rumex crispus Carex nebrascensis Juncus ballicus Deschampsia cespitosa % Species that are OBL, FACW, or FAC (except FAC-): Remarks: Greater than 50% FAC or wetter	Bluegrass,Fowl Dock,Curly Sedge,Nebraska Rush,Ballic Hairgrass,Tufted	FAC FAC+ OBL FACW+ FACW ardin Classification:
Hydrology Prima		
[ ] Recorded Data (describe in remarks) [         [ ] Stream, Lake, or Tide Gage [X]         [ ] Aerial Photograph [         [ ] Other (describe in remarks) [         Field Observations:	ry Wetland Hydrology Indicators Inundated Saturated in upper 12 Inches Water marks Drift lines Sediment deposits Drainage pattems in wetlands	Secondary Hydrology Indicators  [ ] Oxidized root channels  [ ] Water-stained leaves  [ ] Local soil survey data  [X] FAC-Neutral test  [ ] Other (explain in remarks)
Remarks Areas of welland were inundated.		
Soils  Depth Hor. Matrix Mottle / 2nd Mottle (in.) Color Color Ab 0-10 A	Text undance Contrast Stru	ture, cture, etc.
Hydric Solls Indicators  [ ] Histosol [X] Histic Eplpedon [ ] Sulfidic Odor [ ] Probable Aquatic Moist Regime [ ] Reducing Conditions [ ] Gleyed or Low-Chroma Colors  Unit Name: C3t Corvallis silt loam moderately salin Orainage Class: Poorly drained	[ ] Concretions [ ] High Organic % in Sur [ ] Organic Streaking [ ] Listed on Local Hydric [ ] Listed on National Hyd [ ] Other (explain in rema  • Taxonomy: Fluvaquentic Ha [ ] Field Observations match	Soils List Iric Soils List rks) aploborolls
Remarks	[ ] Fleid Observations match	тар
Wetland Determination		
[X] Hydrophytic Vegetation Present [X] Hydric Solls Present [X] Wetland Hydrology Present	[X] This Data Point is a W	etland

Data Form Routine Wetland Determination		Job Number: 0877.008.010.0310 City: Hamilton Wetland Data Point: W-4-03-upl.
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegelation, soils, or hydrology been disturbed? [ ] Is the area a potential problem area?		Date: October 28, 2004 County: Ravalli State: MT Community ID: Upland Station ID: S-4-03 Plot ID: 2
Vegetation	C N	. W. Carrer 1 - Alaskan
Dominant Species	Common Name	% Cover Indicator
Carduus nutans  Shrub  Rosa woodsii  Symphoricarpos albus  Species that are OBL, FACW, or FAC (except FAC-):  Remarks: Less than 50% FAC or wetter	Musk thistie Rose, Woods Snowberry Co	No status FACU FACU FACU
[ ] Recorded Data (describe in remarks) [ ]     [ ] Stream, Lake, or Tide Gage [ ]     [ ] Aerial Photograph [ ]     [ ] Other (describe in remarks) [ ]  Field Observations:	ry Welland Hydrology Indicate Inundated Saturated in upper 12 Inches Water marks Drift Ilnes Sediment deposits Drainage patterns in wetland	[ ] Oxidized root channels [ ] Water-steined leaves [ ] Local soil survey data [ ] FAC-Neutral test [ ] Other (explain in remarks)
Soils	·	
Depth Hor. Matrix Moltle / 2nd Moltle	undance Contrast S	exture, tructure, etc. andy Loam Fine Subangular Blocky
Hydric Solls Indicators  [ ] Histosol  [ ] Histic Epipedon  [ ] Sulfidic Odor  [ ] Probable Aquatic Moist Regime  [ ] Reducing Conditions  [X] Gleyed or Low-Chroma Colors	[ ] Concretions [ ] High Organic % in \$ [ ] Organic Streaking [ ] Lisled on Local Hyo [ ] Lisled on National } [ ] Other (explain in re	iric Solla Liat Hydric Solla Liat
Unit Name: C3r Corvallis silt loam poorly drained va Drainage Class: very poorly drained	ar. Taxonomy: Typic Haplaq [ ] Field Observations ma	
Remarks		
Wetland Determination  [ ] Hydrophylic Vegetalion Present [X] Hydric Soils Present [ ] Welland Hydrology Present Remarks	[ ] This Dala Point is a	Wetland

Data Form		City: Hamilton
Routine Wetland Determination		Wetland Data Point: W-4-03-wi.
Project/Site: Ravalli Co. Airport	<u> </u>	Date: October 28, 2004
Applicant/Owner: Ravaill County		County: Revail!
Investigator: SR/EN		State: MT
(X) Do normal droumstances exist on the site?		Community ID: Wetland
[ ] Have vegetation, soils, or hydrology been dis	turbed?	Station ID: S-4-03
[ ] is the area a potential problem area?		Plot ID: 3-East
Vegetation		
Dominant Species	Common Name	% Cover_ Indicator
<u>Herbaceous</u>		
Hordeum jubatum	Barley,Fox-Tail	FAC
Veronica americana Carex nebrascensis	Speedwell, American	OBL
Glyceria <b>grandi</b> s	Sedge,Nebraska Grass,American <b>Manna</b>	OBL
Phalaris arundinacea	Grass,Reed Canary	No status FACW
% Species that are OBL, FACW, or FAC (except	FAC-):	Cowardin Classification:
Remarks: Greater than 50% FAC or wetter		
Hydrology	<b>B</b> 1	
	Primary Wetland Hydrology Indica	
[ ] Recorded Data (describe in remarks)	[ ] inundated	[ ] Oxidized root channels
[ ] Stream, Lake, or Tide Gage	[X] Saturated in upper 12 inch	es [ ] Water-stained leaves
[ ] Aerial Pholograph	[ ] Water marks	[ ] Local soil survey data
[ ] Other (describe in remarks)	[ ] Drift lines	[X] FAC-Neutral test
Field Observations:	[ ] Sediment deposits	[ ] Other (explain in remarks)
Depth of Surface Water(in.): 0	(X) Drainage patterns in wettar	
Depth to Free Water in Pit(in.): >16		
Depth to Saturated Soits(in.): 0		
Remarks		
Soils		
	de ide	Tank an
Depth Hor. Matrix Mottle / 2nd N	Abundance Contrast	Texture,
0-12 A 10YR 2/1	Andridatica Contrast	Structure, etc. Sandy Loam Fine Subangular Blocky
V 12 /1 /VIIV 21		Salidy Loam Fine Subangular Biocky
Hydric Soils Indicators		
[ ] Histosol	[ ] Concretions	
[ ] Histic Epipedon	[ ] High Organic % is	n Surface Layer
[ ] Sulfidic Odor	[ ] Organic Streaking	g
[ ] Probable Aquatic Moist Regime	[ ] Listed on Local H	lydric Solls List
[ ] Reducing Conditions	[ ] Listed on Nationa	
[X] Gleyed or Low-Chroma Colors	[ ] Other (explain in	•
		· ·
Unit Name: C3r Corvallis silt loam poorty dra		
Drainage Class: Very poorly drained	[ ] Field Observations n	natch map
Remarks		
Wetland Determination		
(X) Hydrophytic Vegetation Present	(V) This Date Details	a AlloHand
(X) Hydric Soils Present	(X) This Data Point is	S A AACITUO
[X] Welland Hydrology Present		
Remarks		

Data Form Routine Wetland Determination		Job Number: 0877.008.010.00 City: Hamilton Wetland Data Point: W-4-04-v	
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [] Have vegetation, soils, or hydrology been disturbed [] Is the area a potential problem area?	d?	Date: October 28, 2004 County: Revalli State: MT Community ID: Wetland Station ID: S-4-04 Plot ID: 4-Gird Creek	vice:
Vegetation Dominant Species	0		
Herbaceous	Common Name	% Cover	Indicator
Juncus balticus Carex nebrascensis Phieum pratense Deschempsia cespitosa Glyceria grandis Veronica americana Phalaris arundinacea % Species that are OBL, FACW, or FAC (except FAC-Remarks: Greater than 50% FAC or wetter	Rush,Ballic Sedge,Nebraska Timothy Hairgrass,Tufted Grass,American Manna Speedwell,American Grass,Reed Canary C	owardin Classification:	FACW+ OBL FAC- FACW No status OBL FACW
Hydrology Prin			
[ ] Recorded Data (describe In remarks) [         [ ] Stream, Lake, or Tide Gage [         [ ] Aerial Photograph [         [ ] Other (describe in remarks) [	nary Wetland Hydrology Indicate X] Inundated X] Saturated in upper 12 inches ] Water marks ] Drift lines ] Sediment deposits X] Drainage patterns in wetland	[ ] Oxidized root s [ ] Water-stained [ ] Local soll surv [X] FAC-Neutral to	channels leaves ey dala est
Soils			
Depth Hor. Malrix Mottle / 2nd Mottle	Abundance Contrast 5	Fexture, Structure, etc. Loarny Sand Loose	
Hydric Soils Indicators  [ ] Histosol  [ ] Histic Epipedon  [ ] Sulfidic Odor  [ ] Probable Aquatic Molst Regime  [ ] Reducing Conditions  [X] Gleyed or Low-Chroma Colors	[ ] Concretions [ ] High Organic % in [X] Organic Streaking [ ] Listed on Local Hyo [ ] Listed on National [ ] Other (explain in re	dric Solls List Hydric Soils List	
Unit Name: C3r Corvallis slit loam poorly drained Drainage Class: Very poorly drained	var. Taxonomy: Typic Haplac		
Remarks			
Wetland Determination			<del></del>
[X] Hydrophylic Vegetation Present [X] Hydric Soils Present [X] Wetland Hydrology Present Remarks	(X) This Data Point is a	a Welland	

Data Form Routine Wetland Determination		Job Number: 0877.008.010.0310 City: Hamilton Welland Data Point: W-5-03-wl.
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegetation, solls, or hydrology been disturbed? [ ] Is the area a potential problem area?  Vegetation		Date: October 28, 2004 County: Ravalli State: MT Community ID: Wetland Station ID: S-5-03 Plot ID: 1
Dominant Species	Common Name	% Cover Indicator
<u>Herbaceous</u>		
Carex nebrascensis Solanum dulcamare Veronica americana Juncus tenuis Trifoflum hybridum Rumex crispus Juncus balticus Deschampsia cespilosa Tree Salix bebbiana % Species that are OBL, FACW, or FAC (except FAC-): Remarks: Greater than 50% FAC or wetter	Sedge,Nebraska Nightshade,Climbing Speedwell,American Rush,Slender Clover,Alsike Dock,Curly Rush,Ballic Hairgrass,Tufted Willow,Bebb	OBL FAC+ OBL FACW- FACW- FAC+ FAC+ FACW+ FACW+ FACW FACW
Hydrology Prima	ry Welland Hydrology Indicato	ors Secondary Hydrology Indicators
[ ] Recorded Data (describe in remarks) [ [ ] Stream, Lake, or Tide Gage [ X [ ] Aerial Photograph [ ] Other (describe in remarks) [ ] Field Observations:	Inundated   Saturated in upper 12 inches   Water marks   Drift lines   Sediment deposits   Drainage patterns in wetland	[ ] Oxidized root channels [ ] Water-stained leaves [ ] Local soll survey data [ ] FAC-Neutral test [ ] Other (explain in remarks)
Soils		
Depth Hor. Matrix Mottle / 2nd Moltle	undance Contrast S	exture, tructure, etc. andy Loam Medium Subangular Blocky
Hydric Soils Indicators  [ ] HIstosot [ ] HIstic Epipedon [ ] Sulfidic Odor [ ] Probable Aquatic Moist Regime [ ] Reducing Conditions [X] Gleyed or Low-Chroma Colors  Unit Name: C3s Corvallis silt loam slightly saline Drainage Class: Somewhat poorty drained  Remarks 6 inches+ is rock	[ ] Concretions [ ] High Organic % in S [ ] Organic Streaking [ ] Listed on Local Hyd [ ] Listed on National H [ ] Other (explain in rei Taxonomy: Fluvauqentic [ ] Field Observations ma	iric Solls List Hydric Solls List marks) Haploborolls
Wetland Determination		
<ul><li>[X] Hydrophylic Vegetation Present</li><li>[X] Hydric Solls Present</li><li>[X] Welland Hydrology Present</li><li>Remarks</li></ul>	[X] This Data Point is a	Welland

Data Form	Job Number: 0877.008.010.0310	
Routine Wetland Determination	City: Hamilton Wetland Data Point: W-5-03-upl.	
Project/Site: Ravalli Co. Airport		
Applicant/Owner: Ravalli County	Dale: October 28, 2004 County: Ravalli	
Investigator: SR/EN	Stale: MT	
[X] Do normal droumstances exist on the site?	Community ID: Upland	
[ ] Have vegetation, soils, or hydrology been disturbed		
[ ] is the area a potential problem area?	Plot ID: 2	
Vegetation		
Dominant Species	Common Name % Cover Indicator	
<u>Herbaceous</u>		
Lacluca serriola	Lettuce, Prickly FACU	
Equisetum laevigatum Agropyron trachycaulum	Scouring-Rush,Smooth FACW Wheatgrass,Siender FAC	
Trifolium spp.	Wheatgrass, Siender FAC Clover spp. NI, FACW+-UP	
Taraxacum officinale	Dandelion, Common FACU	
Carduus nutans	Musk thistle No status	
Centaurea maculosa Shrub	Knapweed, Spotted No Status	
Rosa woodsli	_ Rose,Woods FACU	
% Species that are OBL, FACW, or FAC (except FAC Remarks: Less than 50% FAC or wetter	C-): Cowardin Classification:	
Hydrology Pri	imary Watland Hydrology Indicators Secondary Hydrology Indicators	
	[ ] Inundated [ ] Oxidized root channels	
[ ] Stream, Lake, or Tide Gage	[ ] Saturated in upper 12 inches [ ] Water-stained leaves	
	[ ] Water marks [ ] Local soil survey data	
- · ·	[ ] Drift lines [ ] FAC-Neutral test	
Esta Obsessed services	[ ] Sediment deposits [ ] Other (explain in remarks)	
Fleid Observations:	[ ] Drainage patterns in wellands	
Deput of Surface water(in.): U		
Depth to Free Water in Pit(in.): >16 Depth to Saturated Soils(in.): >16		
Remarks		
Soils		
	te was	
Depth Hor. Matrix Mollie / 2nd Mollie (in.) Color Color	le Texture, Abundance Contrast Structure, etc.	
0-16 A 10YR 3/1	Sandy Clay Loam Medium Subangular Blocky	
Hydric Soils Indicators	. 10	
[ ] Histosol	[ ] Concretions	
[ ] Histic Epipedon	[ ] High Organic % In Surface Layer	
[ ] Sulfidic Odor	[ ] Organic Streaking	
[ ] Probable Aquatic Moist Regime	[ ] Listed on Local Hydric Solls List	
[ ] Reducing Conditions	[ ] Listed on National Hydric Soils List	
[X] Gleyed or Low-Chroma Colors	Other (explain in remarks)	
Unit Name: C3s Corvallis sitt loam slightly saline Drainage Class: Somewhat poorly drained	Taxonomy: Fluvauqentic Haploborolls [ ] Fleid Observations match map	
Remarks		
Wetland Determination		
[ ] Hydrophytic Vegetation Present [X ] Hydric Solls Present [ ] Welland Hydrology Present Remarks	[ ] This Data Point is a Welland	

Data Form Routine Wetland Determination		Job Number: 0877.008.010.03 City: Hamilton Wetland Data Point: W-6-03-w	
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegetation, soils, or hydrology been disturb [ ] Is the area a potential problem area?	ped?	Date: October 28, 2004 County: Ravalli State: MT Community ID: Wetland Station ID: S-6-03 Plot ID: 1	
Vegetation Dominant Species	Common Name	. % Cover	Indicator
Equiselum laevigatum  Herbaceous  Phalaris arundinacea Rumex crispus Deschampsia cespitosa Carex spp. Juncus balticus Carex nebrascensis  Species that are OBL, FACW, or FAC (except FACR) Remarks: Greater than 50% FAC or wetter	Scouring-Rush, Smooth Grass, Reed Canary Dock, Curly Hairgrass, Tufted Sedge spp. Rush, Baltic Sedge, Nebraska	% Cover	FACW FAC+ FACW NI, OBL-FAC FACW+ OBL
Hydrology   Property	rimary Wetland Hydrology Indicato [ ] Inundated [ ] Saturated In upper 12 Inches [ ] Water marks [ ] Drift lines [ ] SedIment deposits [X] Drainage patterns in wetland	[ ] Oxidized root of [ ] Water-stained [ ] Local soil survice [ ] FAC-Neutral to [ ] Other (explain	channels leaves ey data est
Soils  Depth Hor. Matrix (in.) Color Moltle / 2nd Mott Color Color Color	Abundance Contrast S	exture, Rructure, etc. Ray Loam Medium Subangular (	Blocky
Hydric Soils Indicators  [ ] Histosol [ ] Histos Epipedon [X] Sulfidic Odor [ ] Probable Aquatic Molst Regime [ ] Reducing Conditions [X] Gleyed or Low-Chroma Cotors  Unit Name: C3r Corvallis slit loam poorly draine Drainage Class: Very poorly drained  Remarks	[ ] Concretions [ ] High Organic % in S [ ] Organic Streaking [ ] Listed on Local Hyd [ ] Listed on National H [ ] Other (explain in red) d var. Taxonomy: Typic Haplaqu [X] Field Observations ma	ric Solls List Hydric Solls List marks) uolls	
Wetland Determination  [X] Hydrophytic Vegelation Present  [X] Hydric Soils Present  [X] Wetland Hydrology Present  Remarks	[X] This Data Point is a	Welland	

Shares upland data point with W-18-04.

Data Form Routine Wetland Determination		Job Number: 0877.008.010.0310 City: Hamilton Welland Data Point: W-6-03-upt.
Project/Site: Ravalli Co. Alrport Applican/Owner: Ravalli County Investigator: SR/EN [X] Do normal droumstances exist on the site? [ ] Have vegetation, soils, or hydrology been disturbed [ ] Is the area a potential problem area?	17	Date: October 28, 2004 County: Ravalli State: MT Community ID: Upland Station ID: S-6-03 Plot ID: 2
Vegetation Dominant Species	Common Name	% Cover_Indicator
Rosa woodsii  Symphoricarpos albus  % Species that are OBL, FACW, or FAC (except FAC- Remarks: Less than 50% FAC or wetter	Rose, Woods Snowberry	FACU FACU owardin Classification:
Hydrology Print	ary Welland Hydrology Indicate	ors Secondary Hydrology Indicators
[ ] Recorded Data (describe in remarks) [         [ ] Stream, Lake, or Tide Gage [         [ ] Aerial Photograph [         [ ] Other (describe in remarks) [	] Inundated ] Saturaled in upper 12 inches ] Water marks ] Drift lines ] Sediment deposits ] Drainage patterns in welland	[ ] Oxidized root channels [ ] Water-stained leaves [ ] Local soil survey data [ ] FAC-Neutral test [ ] Other (explain in remarks)
Soils		
Depth Hor, Matrix Mottle / 2nd Mottle (in.) Color Color		`exture, Gructure, etc.
0-16 A 10YR <b>3/2</b>		andy Clay Loam Medium Subangular Blocky
Hydric Soils Indicators  [ ] Histosol [ ] Histic Epipedon [ ] Sulfidic Odor [ ] Probable Aquatic Molst Regime [ ] Reducing Conditions [ ] Gleyed or Low-Chroma Colors	[ ] Concretions [ ] High Organic % in [ ] Organic Streaking [ ] Usted on Local Hyo [ ] Listed on National [ ] Other (explain in re	tric Soils List Hydric Solls List
Unit Name: C3r Corvallis slit loam poorly drained Drainage Class: Very poorly drained	var. Texonomy: Typic Haplaq [X] Field Observations ma	
Remarks		
Wetland Determination  [ ] Hydrophytic Vegetation Present [ ] Hydric Solls Present [ ] Wetland Hydrology Present Remarks	[ ] This Data Point is a	aWelland

Data Form Routine Wetland Determination	City:	Hamilton and Dala Point: W-7-03-wi.
Project/Site: Ravalll Co. Airport Applicant/Owner: Ravalll County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegetation, soils, or hydrology been disturt [ ] Is the area a potential problem area?	Cor Sta Cor bed? Sta	te: October 28, 2004 unty: Ravalli tle: MT mmunity ID: Wetland tition ID: 9-7-03
Vegetation  Dominant Species  Herbaceous  Rumex crispus  Deschampsie cespilosa  Poa palustris  Equisetum laevigalum	Common Name  Dock, Curly  Hairgrass, Tufted  Bluegrass, Fowl  Scouring-Rush, Smooth	% Cover Indicator  FAC+ FACW FAC FAC
% Species that are OBL, FACW, or FAC (except FAC) Remarks: Greater than 50% FAC or welter		in Classification:
Hydrology  [ ] Recorded Data (describe In remarks)  [ ] Stream, Lake, or Tide Gage  [ ] Aerial Photograph  [ ] Other (describe in remarks)  Field Observations:  Depth of Surface Water(In.): 0  Depth to Free Water In Pit(in.): >16  Depth to Saturated Soils(in.): >16  Remarks	Primary Wetland Hydrology Indicators  [ ] Inundated [ ] Saturated in upper 12 Inches [ ] Water marks [ ] Drift lines [ ] Sediment deposits [X] Dralnage patterns in wetlands	Secondery Hydrology Indicators  [ ] Oxidized root channels  [ ] Water-stained leaves  [ ] Local soil survey data  [X] FAC-Neutral test  [ ] Other (explain in remarks)
Soils           Depth (In.)         Hor. Matrix         Mottle / 2nd	Abundance Contrast Structu	e, ire, etc. Clay Loam Fine Subangular Blocky
Hydric Soils Indicators  [ ] Histosol  [ ] Histic Epipedon  [X] Sulfidic Odor  [ ] Probable Aquatic Moist Regime  [ ] Reducing Conditions  [X] Gleyed or Low-Chroma Colors	[ ] Concretions [ ] High Organic % in Surfac [ ] Organic Streaking [ ] Listed on Local Hydric So [ ] Listed on National Hydric [ ] Other (explain in remarks	oils List : Soils List
Unit Name: C3r Corvallis silt loam poorly drain Drainage Class: Very poorly drained	ned var. Taxonomy: Typic Haplaquolis [ ] Field Observations match m	
Remarks		
Wetland Determination  [X] Hydrophytic Vegetation Present  [X] Hydric Soils Present  [X] Wetland Hydrology Present  Remarks	[X] This Dala Point is a Wet	land

Data Form Routine Wetland Determination		Job Number: 0877,008.010,0310 City: Hamilton Wetland Data Point: W-7-03-upl.
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegetation, soils, or hydrology been disturb [ ] Is the area a potential problem area?	bed?	Date: October 28, 2004 County: Ravalli State: MT Community ID: Upland Station ID: S-7-03 Plot ID: 2
Vegetation		
Dominant Species Herbaceous	Common Name	% Cover Indicator
Agropyron smithil Aster spp. Equisetum leevigetum Cirsium arvense Shrub Symphoricarpos albus % Species that are OBL, FACW, or FAC (except FA Remarks: Less than 50% FAC or wetter	Whealgrass, Western Aster spp. Scouring-Rush, Smooth Thistle, Creeping Snowberry C-):	FACU NI, OBL-UPL FACW FACU+  FACU  FACU  Cowardin Classification:
Hydrology	rimary Wetland Hydrology Indical	lors Secondary Hydrology Indicators
[ ] Recorded Data (describe in remarks)         [ ] Stream, Lake, or Tide Gage         [ ] Aerial Photograph         [ ] Other (describe in remarks)  Field Observations:         Depth of Surface Water(in.): 0         Depth to Free Water in Pit(in.): >16         Depth to Saturated Soils(in.): >16  Remarks	[ ] Inundated [ ] Saturated in upper 12 inche [ ] Water marks [ ] Drift lines [ ] Sediment deposits [ ] Drainage patterns in wetland	[ ] Oxidized root channels s [ ] Water-stained leaves [ ] Local soil survey data [ ] FAC-Neutral test [ ] Other (explain in remarks)
Soils		
Depth Hor. Matrix Mottle / 2nd Mot		Texture,
(in.) <u>Color</u> <u>Color</u> 0-16 A 10YR 3/2		Structure, etc. Sandy Clay Loam Coarse Subangular Blocky
Hydric Soils Indicators  [ ] Histosol [ ] Histle Epipedon [ ] Sulfildic Odor [ ] Probable Aquatic Moist Regime [ ] Reducing Conditions [ ] Gleyed or Low-Chroma Colors  Unit Name: C3s Corvalits sitt loam slightly salid  Drainage Class: Somewhat poorty drained	[ ] Concretions [ ] High Organic % in [ ] Organic Streaking [ ] Listed on Local Hy [ ] Listed on National [ ] Other (explain in n	Surface Layer rddc Solls List Hyddc Solls List emarks) c Haploborolls
Wetland Determination		
[ ] Hydrophylic Vegetation Present [ ] Hydric Soils Present [ ] Wetland Hydrology Present	[ ] This Data Point Is	a Welland

Data Form		Job Number: 0877.008.010.0310
Routine Wetland Determination		City: Hamilton
Rodine Welland Determination		Welland Data Point: W-8-03-wi.
Project/Site: Ravalti Co. Airport		Dale: October 28, 2004
Applicant/Owner: Ravalli County		County: Ravaill
Investigator: SR/EN		State: MT
[X] Do normal circumstances exist on the site?		Community ID: Wetland
[ ] Have vegetation, solls, or hydrology been disturbed	1?	Station ID: S-8-03
[ ] Is the area a potential problem area?		Plot ID: 1
Vegetation	-	
Dominant Species	Common Name	% Cover Indicator
Herbaceous .		
Carex nebrascensis Plantago spp.	Sedge,Nebraska Plantaln	OBL
Epilobium <b>ciliatum</b>	Willow-Herb, Hairy	OBL-UPL
Phieum pratense	Timothy	FACW- FAC-
Cirsium arvense	Thistle, Creeping	FACU+
Deschampsia cespitosa	Hairgrass, Tufled	FACW
Glyceria <b>grandis</b> Veronica americana	Grass, American Manna	No status
% Species that are OBL, FACW, or FAC (except FAC-	Speedwell,American	wardin Classification:
Remarks: Greater than 50% FAC or wetter		maront Classification.
Hydrology Prim		
	ary Wetland Hydrology Indicator	
	() Inundated	[ ] Oxidized root channels
	() Salurated in upper 12 inches	[ ] Water-stained leaves
	] Water marks	[ ] Local soil survey data
	] Drift lines	[X] FAC-Neutral test
FIBIO COSEIVAIIONS.	] Sediment deposits	[ ] Other (explain in remarks)
Depth of Surface Water(in.); 0	<ul><li>Orainage patterns in wetlands</li></ul>	3
Depth to Free Water in Pit(in.): 4		
Depth to Saturated Soils(in.); 0		
• • • • • • • • • • • • • • • • • • • •		
Remarks		
Soils	<del></del>	
Depth Hor. Matrix Mottle / 2nd Mottle		exture,
(in.) Color Color A 0-10 A 10YR 2/1		tructure, etc.
0-10 A 101(2)	26	andy Loam Fine Subangular Blocky
Hydric Soils Indicators		
[ ] Histosol	[ ] Concretions	
[ ] Histic Epipedon	[ ] Hilgh Organic % in S	urface Layer
[X] Sulfidic Odor	[ ] Organic Streaking	
[ ] Probable Aqualic Moist Regime	[ ] Listed on Local Hydr	ric Soils List
[ ] Reducing Conditions	[ ] Listed on National H	lydric Soils List
[X] Gleyed or Low-Chroma Colors	[ ] Other (explain in ren	narks)
Unit Name: C3s Corvallis silt loam slightly saline	Tavana	Hanloharalia
Drainage Class: Somewhat poorly drained		DADIOUGIUS
-	Taxonomy: Fluvaugentic	
Remarks	[ ] Field Observations mate	
10+ Inches is rock		
10+ Inches is rock Wetland Determination		
Wetland Determination	[ ] Field Observations male	ch map
Wetland Determination [X] Hydrophylic Vegetation Present		ch map
Wetland Determination	[ ] Field Observations male	ch map

Share upland data point with W-5-03-upl.

Data Form Routine Wetland Determination	Job Number: 0877. City: Hamilton Wetland Data Point	
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal droumstances exist on the site? [ ] Have vegetation, soits, or hydrology been disturbed? [ ] Is the area a potential problem area?	Date: October 28 County: RavallI State: MT Community ID: U Station ID: S-8-03 Plot ID: 2	pland
Vegetation  Dominant Species	Common Name	% Cover _Indicator
Herbaceous Trifolium spp. Centeurea maculosa Phleum pratense Cirsium arvense % Species that are OBL, FACW, or FAC (except FAC-): Remarks: Less than 50% FAC or welter	Clover spp. Knapweed, Spotted Timothy Thistle, Creeping	NI, FACW+-UPL No Status FAC- FACU+
[ ] Recorded Data (describe in remarks) [ ] [ ] Stream, Lake, or Tide Gage [ ] [ ] Aerial Pholograph [ ] [ ] Other (describe in remarks) [ ]	] Inundated [ ] Oxi ] Saturated in upper 12 inches [ ] Wa ] Water marks [ ] Loc ] Drift lines [ ] FAC	y Hydrology Indicators dized root channels ter-stained leaves cal solf survey data C-Neutral test ner (explain in remarks)
Soils		
Depth Hor. Matrix Mottle / 2nd Mottle	Texture, Structure, etc. Sandy Loarn Medium	Subangular Blocky
Hydric Soils Indicators  [ ] Histosol [ ] Histic Epipedon [ ] Sulfidic Odor [ ] Probable Aquatic Molst Regime [ ] Reducing Conditions [ ] Gleyed or Low-Chroma Colors  Unit Name: C3s Corvallis silt loam slightly saline Drainage Class: Somewhat poorly drained  Remarks	[ ] Concretions [ ] High Organic % in Surface Layer [ ] Organic Streaking [ ] Listed on Local Hydric Soils List [ ] Listed on National Hydric Soils List [ ] Other (explain in remarks)  Taxonomy: Fluvauqentic Haploborolis [ ] Field Observations match map	
Wetland Determination [ ] Hydrophytic Vegetation Present [ ] Hydric Soils Present [ ] Wetland Hydrology Present	[ ] This Data Point is a Wetland	

Data Form	1	Job Number: 0877.008.010.0310 Cily: Hamilton
Routine Wetland Determination		Welland Data Point: W-9-03-wl.
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal droumstances exist on the site? [ ] Have vegetation, soils, or hydrology been dis [ ] Is the area a potential problem area?	lurbed?	Date: October 28, 2004 County: Ravalli State: MT Community ID: Wetland Station ID: S-9-03 Plot ID: 1
Vegetation		
Dominant Species	Common Name	% Cover Indicator
Herbaceous Phieum alpinum Deschampsia cespilosa Juncus ballicus Equisetum laevigatum % Species that are OBL, FACW, or FAC (except Remarks: Greater than 50% FAC or welter	Timothy,Alpine Hairgrass,Tufted Rush,Baltic Scouring-Rush,Smoolh FAC-):	FACW FACW+ FACW+ FACW wardin Classification:
Hydrology	Primary Wetland Hydrology Indicator	s Secondary Hydrology Indicators
[ ] Recorded Dala (describe In remarks)	[ ] Inundated [ ] Saturated in upper 12 inches [ ] Water marks [ ] Drift lines [ ] Sediment deposits [X] Drainage pattems in wetlands	[ ] Oxidized root channels [ ] Water-stained leaves [ ] Local soil survey data [X] FAC-Neutral test [ ] Other (explain In remarks)
Soils	<u>-</u>	
Depth         Hor.         Matrix         Mottle / 2nd Mott	Abundance Contrast St	xture, ructure, etc. Indy Clay Loam Fine Subangular Blocky
	A	
Hydric Soils Indicators  {	[ ] Concretions [ ] High Organic % in Si [ ] Organic Streaking [ ] Listed on Local Hydri [ ] Listed on National Hy [ ] Other (explain in rem	ic Solls List ydric Solls List arks)
Unit Name: C3s Corvellis silt loam slightly s Drainage Class: Somewhat poorly drained	aline Taxonomy: Fluvauqentic I [ ] Field Observations mate	•
Remarks		
Wetland Determination		
[X] Hydrophytic Vegetation Present [X] Hydric Soils Present [X] Welland Hydrology Present	(X) This Dala Point is a \	Welland

Data Form Routine Wetland Determination	Ċ	ob Number: 0877.008.010.0310 Gily: Hamilton Velland Data Point: W-9-03-upl.
Project/Site: Ravalli Co. Airport Applicant/Owner: Revalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegetation, soils, or hydrology been disturbed as the area a potential problem area?		Date: October 28, 2004 County: Ravaill State: MT Community ID: Upland Station ID: S-9-03 Plot ID: 2
Vegetation		
Dominant Species	Common Name	% Cover Indicator
Herbaceous Trifolium spp. Medicago sative Deschampsia cespitosa Dactylis glomerata % Species that are OBL, FACW, or FAC (except FAC Remarks: Less than 50% FAC or wetter	Clover spp. Alfalfa Hairgrass, Tufted Grass, Orchard -): Cow	NI, FACW+-UPL No status FACW FACU rardin Classification:
Hydrology Pri		
[ ] Recorded Data (describe in remarks)         [ ] Stream, Lake, or Tide Gage         [ ] Aerial Photograph         [ ] Other (describe in remarks)  Field Observations:	mary Wetland Hydrology Indicators [ ] Inundated [ ] Saturated In upper 12 inches [ ] Water marks [ ] Drift lines [ ] Sediment deposits [ ] Drainage pattems in wetlands	Secondary Hydrology Indicators  [ ] Oxidized root channels  [ ] Water-stained leaves  [ ] Local soil survey data  [ ] FAC-Neutral test  [ ] Other (explain in remarks)
Soils		
Depth Hor. Matrix Mottle / 2nd Mottle	Abundance Contrast Str	klure, ucture, etc. ndy Clay Loam Fine Subangular Blocky
Hydric Soils Indicators  [ ] Histosol [ ] Histic Epipedon [ ] Sulfidic Odor [ ] Probable Aquatic Moist Regime [ ] Reducing Conditions [X] Gleyed or Low-Chroma Colors  Unit Name: C3s Corvallis silt loam slightly saling Drainage Class: Somewhat poorly drained	[ ] Concretions [ ] High Organic % in Su [ ] Organic Streaking [ ] Listed on Local Hydric [ ] Listed on National Hy [ ] Other (explain in remains)  Taxonomy: Fluvaugentic Hamiltonian mate	c Soils List dric Soils List arks) laploborolis
Remarks		
Wetland Determination		
[ ] Hydrophytic Vegetation Present [X] Hydric Soils Present [ ] Wetland Hydrology Present Remarks	[ ] This Data Point is a V	Vetland

Data Form Routine Wetland Determination	Cily	Number: 0877.008.010.0310 : Hamilton tland Data Point: W-10-03-wi.
Project/Site: Ravalli Go. Alrport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegetation, soils, or hydrology been disturbed as the area a potential problem area?	Co   St   Co   ed?   St	ale: October 28, 2004  bunty: Ravalli late: MT  bummunity ID: Wetland lation ID: S-10-03  ot ID: 1
Vegetation <u>Dominant</u> Species	Common Name	% Cover Indicator
Herbaceous  Juncus balticus Carex nebrascensis Rumex crispus Deschampsia cespitosa Juncus tenuis  % Species that are OBL, FACW, or FAC (except FAC) Remarks: Greater than 50% FAC or wetter	Rush,Ballic Sedge,Nebraska Dock,Curly Hairgrass,Tufted Rush,Slender  Cowar	FACW+ OBL FAC+ FACW FACW- din Classification:
Hydrology Pri	mary Welland Hydrology Indicators	Secondary Hydrology Indicators
[ ] Recorded Data (describe in remarks) [ ] Stream, Lake, or Tide Gage	[ ] Inundated [ ] Saturated in upper 12 inches [ ] Water marks [ ] Drift fines [ ] Sediment deposits [X] Drainage patterns in wellands	[ ] Oxidized root channels [ ] Water-stained leaves [ ] Local soll survey data [X] FAC-Neutral test [ ] Other (explain in remarks)
Soils	·	
Depth (in.)         Hor. Malrix         Moltle / 2nd Moltle           Color         Color           0-12         A           10YR 2/1	Abundance Contrast Struct	re, ture, etc. y Clay Loam Medium Subangular Blocky
Hydric Soils Indicators  [ ] Histosol [ ] Histic Epipedon [ ] Sulfidic Odor [ ] Probable Aquatic Molst Regime [ ] Reducing Conditions [X] Gleyed or Low-Chroma Colors  Unit Name:C3v Corvallis silt loam mod shallow sooralnage Class; Silghtly poorly drained	[ ] Concretions [ ] High Organic % in Surfa [ ] Organic Streaking [ ] Listed on Local Hydric S [ ] Listed on National Hydric [ ] Other (explain in remark slight saline Taxonomy: Fluvaquent	iolls List c Soils List :s) tic Haploborolls
Wetland Determination		
[X] Hydrophylic Vegetation Present [X] Hydric Soils Present	[X] This Data Point is a Wet	tland

[X] Welfand Hydrology Present

Data Form	City: Hamilton
Routine Wetland Determination	Wetland Data Point: W-10-03-upl.
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [] Have vegetation, solls, or hydrology been disturb [] Is the area a potential problem area? Vegetation	Date: October 28, 2004 County: Ravalll State: MT Community ID: Upland ed? Station ID: S-10-03 Plot ID: 2
Dominant Species	Common Name
Herbaceous Poa palustris Phieum pratense Sisymbrium altissimum Cirsium arvense % Species that are OBL, FACW, or FAC (except FACR Remarks: Less than 50% FAC or welter	Bluegrass,Fowl FAC Timothy FAC- Mustard, Tall Tumble FACU- Thistle,Creeping FACU+ C-): Cowardin Classification:
Hydrology  [] Recorded Data (describe in remarks)  [] Stream, Lake, or Tide Gage [] Aerial Photograph [] Other (describe in remarks)  Field Observations:  Depth of Surface Water(in.): 0  Depth to Free Water in Pit(in.): >16  Depth to Saturated Soils(in.): >18  Remarks	imary Wetland Hydrology Indicators  [ ] Inundated [ ] Saturated in upper 12 inches [ ] Water marks [ ] Drift lines [ ] Sediment deposits [ ] Dralnage patterns in wetlands  Secondary Hydrology Indicators [ ] Oxidized root channels [ ] Water-stained leaves [ ] Local soil survey data [ ] FAC-Neutral test [ ] Other (explain in remarks)
Soils	
Depth Hor. Matrix Mottle / 2nd Mottle (in.) Color Color Color 12-16 A 2.5Y 3/2 12-16 A 2.5Y 4/3	le Texture, Abundance Contrast Structure, etc. Sandy Clay Loam Medium Subangular Blocky Sandy Clay Loam Medium Subangular Blocky
Hydric Soils Indicators  [ ] Histosol [ ] Histic Epipedon [ ] Sulfidic Odor [ ] Probable Aquatic Moist Regime [ ] Reducing Conditions [ ] Gleyed or Low-Chroma Colors	[ ] Concretions [ ] High Organic % In Surface Layer [ ] Organic Streaking [ ] Listed on Local Hydric Soils List [ ] Listed on National Hydric Soils List [ ] Other (explain in remarks)
Unit Name: C3s Corvallis stit loam slightly salin Drainage Class: Somewhat poorly drained Remarks	Texonomy: Fluvauqentic Haploborolls  [ ] Field Observations match map
Wetland Determination  [ ] Hydrophytic Vegetation Present [ ] Hydric Soils Present [ ] Wetland Hydrology Present Remarks	[ ] This Data Point is a Wetland

Data Form Routine Wetland Determination		Job Number: 0877.008.010.03 City: Hamilton Welland Data Point: W-11-03-	
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegetation, soils, or hydrology been disturbed? [ ] Is the area a potential problem area?		Date: October 28, 2004 County: Ravalli Stale: MT Community ID: Wetland Station ID: S-11-03 Plot ID: 1	-
Vegetation  Dominant Species	Common Name	% Cover	Indicator
Solanum dulcamara Conium Maculatum Cirsium arvense Mentha arvensis Glyceria grandis Phalaris arundinacea Typha latifolia % Species that are OBL, FACW, or FAC (except FAC-): Remarks: Greater than 50% FAC or wetter	Nightshade, Climbing Poison-Hemlock Thistle, Creeping Mint, Field Grass, American Manna Grass, Reed Canary Cattail, Broad-Leaf	owardin Classification:	FAC+ FAC+ FACU+ FACW- No status FACW OBL
[ ] Recorded Data (describe in remarks) [X]   [ ] Stream, Lake, or Tide Gage [X]   [ ] Aerial Photograph [ ]   [ ] Other (describe in remarks) [ ]  Field Observations:	ry Wetland Hydrology Indicat I hundated   Saturated in upper 12 inches   Water marks   Drift lines   Sediment deposits   Drainage patterns in wetland	[ ] Oxidized root of s [ ] Water-stained [ ] Local soil surve [X] FAC-Neutral te [ ] Other (explain	hannels leaves ey data st
Soils			
Depth         Hor.         Matrix         Mottle / 2nd Mottle           (In.)         Color         Color         Ab           0-8         A         10YR 2/1	undance Contrast S	Fexlure, Structure, etc. Sandy Loam Fine Subangular Bl	ocky
Hydric Sails Indicators  [ ] Histosol [ ] Histic Epipedon [ ] Sulfidic Odor [ ] Probable Aquatic Molst Regime [ ] Reducing Conditions [X] Gleyed or Low-Chroma Colors  Unit Name: G2n Grantsdale Loam, level	[ ] Concretions [ ] High Organic % in a graph of the control of th	dric Solls List Hydric Solls List marks)	
Drainage Class: Well Drained	Taxonomy: Calciorthidio [ ] Field Observations ma	-	
Remarks 8+ Inches was rock/gravel Wetland Determination			
[X] Hydrophytic Vegetation Present [X] Hydric Soils Present [X] Wetland Hydrology Present	(X) This Dala Point is a	a Welland	

Routine Wetland Determination		City: Hamilton Welland Data Point: W-11-03-upl.
		:
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County		Dale: October 28, 2004 County: Ravalli
Investigator: SR/EN		State: MT
[X] Do normal circumstances exist on the site?		Community ID: Upland
[ ] Have vegetation, soils, or hydrology been disturb	ed?	Station ID: S-11-03
[ ] is the area a potential problem area?		Plot ID: 2
Vegetation		
Dominant Species	Common Name	% Cover Indicator
Herbaceous	Markey	54.011
Rosa woodsii Geranium richardsonii	Wood's rose	FACU
Dactylis glomerata	Crane's-Bill,Richardson's Grass,Orchard	FAC- FACU
<u>Shrub</u>		
Symphoricarpos albus % Species that are OBL, FACW, or FAC (except FA)	Suowperry	wardin Classification:
Remarks: Less than 50% FAC or wetter	<i>-</i> ,.	maion classification.
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Hydrology Pri	imary Wetland Hydrology Indicato	rs Secondary Hydrology Indicators
[ ] Recorded Data (describe in remarks)	[ ] Inundated	[ ] Oxidized root channels
[ ] Stream, Lake, or Tide Gage	[ ] Saturated in upper 12 Inches	[ ] Water-stained leaves
[ ] Aerlal Pholograph	[ ] Water marks	[ ] Local soil survey data
[ ] Other (describe in remarks)	[ ] Drift lines	[ ] FAC-Neulral lest
Field Observations:	[ ] Sediment deposits	[ ] Other (explain in remarks)
Depth of Surface Water(in.): 0	[ ] Drainage patterns in wetlands	5
Depth to Free Water in Pit(in.): >16		
Depth to Saturated Solls(in.): >16		
Remarks		
Calla		
Soils		
Depth Hor. Matrix Mottle / 2nd Mottle (in.) Cofor Cofor		exture, tructure, etc.
0-14 A 10YR 3/3		andy Loam Fine Subangular Blocky
Hydric Soils Indicators		
[ ] Histosol	[ ] Concretions	
[ ] Histic Epipedon	[ ] High Organic % In S	Surface Layer
[ ] Sulfidic Odor	[ ] Organic Streaking	
[ ] Probable Aquatic Molst Regime	[ ] Listed on Local Hyd	
[ ] Reducing Conditions	[ ] Listed on National F	
[ ] Gleyed or Low-Chroma Colors	[ ] Other (explain in rer	narks)
Unit Name: G2n Grantsdale loam, level	Taxonomy: Calclorthidic	
Drainage Class: Well Drained	[ ] Field Observations mai	tch map
Remarks		
Wetland Determination		
[ ] Hydrophytic Vegetation Present	[ ] This Dala Point is a	Wetland
[ ] Hydric Soils Present		
[ ] Wetland Hydrology Present		

Data Form Routine Wetland Determination		Job Number: 0877.008.010.0 City: Hamilton Welland Dala Point: W-12-03	
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegetation, soils, or hydrology been disturb [ ] Is the area a potential problem area?	ped?	Date: October 28, 2004 County: Ravalli State; MT Community ID: Wetland Station ID: S-12-03 Plot ID: 1	
Vegetation  Dominant Species	Common Name	% Cover	Indicator
Herbaceous Cirsium arvense Glyceria grandis Geum macrophyllum Carex nebrascensis Phalaris arundinacea Ribes lacustre Tree Populus balsamifera % Species that are OBL, FACW, or FAC (except FA Remarks: Greater than 50% FAC or welter	Thistle, Creeping Grass, American Manna Avens, Large-Leaf Sedge, Nebraska Grass, Reed Canary Currant, Prickly Poplar, Balsam C-):	Cowardin Classification:	FACU+ No status FACW- OBL FACW FAC+
Hydrology  [ ] Recorded Data (describe in remarks)  [ ] Stream, Lake, or Tide Gage  [ ] Aerial Photograph  [ ] Other (describe in remarks)  Field Observations:  Depth of Surface Water(in.): 4  Depth to Free Water in Plt(in.): 0  Depth to Saturated Solls(in.): 0  Remarks	rimary Wetland Hydrology Indicative [X] Inundated [X] Salurated in upper 12 incheted incheted in Upper 12 incheted	[ ] Oxidized root es [ ] Water-stained [ ] Local soil sur [X] FAC-Neutral [ ] Other (explain	channels d leaves vey data test
Soils		<del></del>	
Depth Hor. Matrix   Mottle / 2nd Mottle (In.)   Color   Colo	de Contrasi	Texture, Structure, etc. Sandy Loam Fine Subangular I	Blocky
Hydric Soils Indicators  [ ] Histosol [ ] Histic Epipedon [ ] Sulfidic Odor [ ] Probable Aquatic Moist Regime [ ] Reducing Conditions [X] Gleyed or Low-Chroma Colors Unit Name: C3s Corvallis silt loam slightly salls Drainage Class: Somewhat poorly drained Remarks	[ ] Concretions [ ] High Organic % ir [ ] Organic Streaking [ ] Listed on Local H [ ] Listed on Nationa [ ] Other (explain in a	) ydric Soils List I Hydric Solls List remarks) Ic Haploborolls	
Wetland Determination  [X] Hydrophyllc Vegelation Present  [X] Hydric Soils Present  [X] Wetland Hydrology Present	[X] This Data Point is	a Welland	

Data Form Routine Wetland Determination		Job Number: 0877.008.010.0310 City: Hamilton Wetland Data Point: W-12-03-upl.
Project/Site: Ravalii Co. Airport Applicant/Owner: Ravalii County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegetation, solls, or hydrology been distu [ ] Is the area a potential problem area?	rbed?	Date: October 28, 2004 County: Ravalli State: MT Community ID: Upland Station ID: S-12-03 Plot ID: 2
Vegetation		
Dominant Species Herbaceous	Common Name	% Cover Indicator
Cirsium arvense Centaurea maculosa Senecio serre Cynoglossum officinale % Species that are OBL, FACW, or FAC (except F Remarks: Less than 50% FAC or welter	Thistle, Creeping Knapweed, Spotted Groundsel, Bulterweed Houndstongue  AC-):  Co	FACU+ No Status FACU FACU FACU FACU
Hydrology	_ <del>.</del>	
Hydrology  [ ] Recorded Data (describe in remarks)  [ ] Stream, Lake, or Tide Gage  [ ] Aerial Photograph  [ ] Other (describe in remarks)  Field Observations:  Depth of Surface Water(in.): 0  Depth to Free Water in Pil(in.): >16  Depth to Saturated Soils(in.): >16  Remarks	Primary Welland Hydrology Indicator [ ] Inundated [ ] Saturated in upper 12 inches [ ] Water marks [ ] Drift lines [ ] Sediment deposits [ ] Drainage patterns in wetlands	[ ] Oxidized root channels [ ] Water-stained leaves [ ] Local soil survey data [ ] FAC-Neutral test [ ] Other (explain in remarks)
Soils		
Depth Hor. Matrix   Mottle / 2nd Mottle /	Abundance Contrast St	exture, ructure, etc. andy Loam Fine Subangular <b>Blocky</b>
Hydric Soils Indicators  [ ] Histosol [ ] Histic Epipedon [ ] Sulfidic Odor [ ] Probable Aquatic Moist Regime [ ] Reducing Conditions [ ] Gleyed or Low-Chroma Colors	[ ] Concretions [ ] High Organic % in S [ ] Organic Streaking [ ] Listed on Local Hydu [ ] Listed on National H [ ] Other (explain in ren	dc Soils List yddc Solls List
Unit Name: C3s Corvaills silt loam slightly Drainage Class: Somewhat poorly drained	Taxonomy: Fluvauqentic [ ] Field Observations mat	Haploborolis
Remarks		
Wetland Determination		
[ ] Hydrophytic Vegetation Present [ ] Hydric Solls Present [ ] Wetland Hydrology Present Remarks	[ ] This Dala Poinl is a	Welland

Data Form Routine Wetland Determination	Job Number: 0877.008.010. Cily: Hamilton Welland Data Point: W-13-0	
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegetation, soils, or hydrology been disturbed? [ ] Is the area a potential problem area?	Dale: October 28, 2004 County: Ravalli Stale: MT Community ID: Wetland Station ID: S-13-03 Plot ID: 1	
Vegetation		
Dominant Species Herbaceous	Common Name % Cover	r Indicator
Poe palustris Phalaris erundinacea Deschampsia cespitosa Rumex crispus Carex nebrascensis Cirsium arvense Shrub Salix spp. Rosa woodsii Tree Populus tremula % Species that are OBL, FACW, or FAC (except FAC-): Remarks: Greater than 50% FAC or wetter	Bluegrass, Fowl Grass, Reed Canary Hairgrass, Tufted Dock, Curly Sedge, Nebraska Thistle, Creeping Willow, spp. Rose, Woods Aspen, Quaking Cowardin Classification:	FAC FACW FAC+ OBL FACU+ NI, OBL- FACU
Hydrology Prime	ary Welland Hydrology Indicators Secondary Hydrolo	
[ ] Recorded Data (describe in remarks) [         [ ] Stream, Lake, or Tide Gage [         [ ] Aerial Photograph [         [ ] Other (describe in remarks) [	] Inundated [ ] Oxidized roo ] Saturated in upper 12 inches [ ] Water-stains ] Water marks [ ] Local soil su ] Drift lines [X] FAC-Neutral ] Sediment deposits [ ] Other (explain) ] Drainage patterns in wetlands	ot channels ed leaves rvey data test
Soils		· <del>-</del>
Depth   Hor.   Matrix   Mottle / 2nd Mottle	Texture,  oundance Contrast Structure, etc.  Clay Loarn Medium Subangula	r Blocky
Hydric Soils Indicators  [ ] Histosol [ ] Histic Epipedon [ ] Sulfidic Odor [ ] Probable Aqualic Moist Regime [ ] Reducing Conditions [X] Gleyed or Low-Chroma Colors  Unit Name: C3s Corvallis silt loam slightly saline Drainage Class: Somewhat poorly drained  Remarks  Wetland Determination	[ ] Concretions [ ] High Organic % in Surface Layer [ ] Organic Streaking [ ] Listed on Local Hydric Solls List [ ] Listed on National Hydric Soils List [ ] Other (explain in remarks)  Taxonomy: Fluvauqentic Haploborolls [ ] Field Observations match map	
[X] Hydrophytic Vegetation Present [X] Hydric Soils Present [X] Wetland Hydrology Present Remarks	[X] This Data Point is a Wetland	

Routine Wetland Determination		City: Hamilton Wetland Data Point: W-13-03-	-upl.
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal droumstances exist on the site? [ ] Have vegetation, soils, or hydrology been disturbed [ ] is the area a potential problem area?	d?	Date: October 28, 2004 County: Ravalli State: MT Community ID: Upland Station ID: S-13-03 Plot ID: 2	85 ···
Vegetation	-		
Dominant Species	Common Name	% Cover_	Indicator
Herbaceous  Carduus nutans Centaurea maculosa Cirsium arvense Tanacetum vulgare Shrub	Musk thistle Knapweed, Spotted Thistle, Creeping Tansy, Common		No slatus No Status FACU+ NI
Symphoricarpos <b>albus</b> Rosa woodsii	Snowberry Rose,Woods		FACU FACU
% Species that are OBL, FACW, or FAC (except FAC- Remarks: Less than 50% FAC or wetter		owardin Classification:	_FACU
[ ] Recorded Data (describe in remarks) [	mary Wetland Hydrology Indicato    Inundated   Saturated In upper 12 Inches     Water marks   Drift lines     Sediment deposits     Drainage pattems in wetlands	[ ] Oxidized root of [ ] Water-stained [ ] Local soil surv [ ] FAC-Neutral to [ ] Other (explain	channels leaves ey dala est
Soils  Depth Hor. Matrix Mottle / 2nd Mottle (in.) Color Color / 0-16 A 10YR 3/2	Abundance Contrast S	exture, tructure, etc. andy Clay Loam Medium Suba	ngular Blocky
Hydric Soils Indicators  [ ] Histosol [ ] Histic Epipedon [ ] Sulfidic Odor [ ] Probable Aquatic Molet Regime [ ] Reducing Conditions [ ] Gleyed or Low-Chroma Colors	[ ] Concretions [ ] High Organic % in S [ ] Organic Streaking [ ] Listed on Local Hyd [ ] Listed on National F [ ] Other (explain in rei	Iric Solls List Hydric Solls List	
Unit Name: C3s Corvaills silt loam slightly Drainage Class: Somewhat poorly drained	Taxonomy: Fluvauqentic [ ] Field Observations ma		
Remarks			
Wetland Determination	_		
[ ] Hydrophytic Vegetation Present [ ] Hydric Soils Present [ ] Wetland Hydrology Present Remarks	[ ] This Dala Point is a	Welland	

Data Form Routine Wetland Determination		Job Number: 0877.008.010.0310 City: Hamilton Welland Data Point: W-14-03-wi.
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN  [X] Do normal circumstances exist on the site?  [] Have vegetation, soils, or hydrology been did.  [] Is the area a potential problem area?	sturbed?	Date: October 28, 2004 County: Ravalli State: MT Community ID: Wetland Station ID: S-14-03 Plot ID: 1
Vegetation Dominant Species	Common Name	% Cover Indicator
Herbaceous Phelaris arundinacea Tanacetum vulgare Senecio serra Shrub Symphoricarpos albus % Species that are OBL, FACW, or FAC (excep	Grass,Reed Canary Tansy,Common Groundsel,Butterweed Snowberry	% Cover Indicator  FACW NI FACU FACU Cowardin Classification:
Hydrology  [ ] Recorded Data (describe in remarks)         [ ] Stream, Lake, or Tide Gage         [ ] Aerial Photograph         [ ] Other (describe in remarks)  Field Observations:         Depth of Surface Water(in.): 0         Depth to Free Water in Pit(in.): >14         Depth to Saturated Solls(in.): >14  Remarks	Primary Wetland Hydrology Indicated [ ] Inundated [ ] Saturated in upper 12 inches [ ] Water marks [ ] Drift lines [ ] Sediment deposits [X] Drainage patterns in wetland	[ ] Oxidized root channels es [ ] Water-stained leaves [ ] Local soll survey data [ ] FAC-Neutral test [ ] Other (explain in remarks)
Soils		
Depth (in.)         Hor. Malrix (in.)         Mottle / 2nd (color	Abundance Contrast	Texture, Structure, etc. Sandy Clay Loam Fine Subangular Blocky
Hydric Soils Indicators  [ ] Histosol [ ] Histic Eplpedon [ ] Sulfidic Odor [ ] Probable Aquatic Moist Regime [ ] Reducing Conditions [X] Gleyed or Low-Chroma Colors	[ ] Concretions [ ] High Organic % in [ ] Organic Streaking [ ] Listed on Local Hy [ ] Listed on National [ ] Other (explain in n	ydric Soils List Hydric Soils List
Unit Name: B3f Burnt Fork Loam, Level Drainage Class: Well Drained	Taxonomy: Aridic Haple [ ] Field Observations m	
Remarks		
Wetland Determination		
<ul><li>[X] Hydrophytic Vegetation Present</li><li>[X] Hydric Soils Present</li><li>[X] Wetland Hydrology Present</li><li>Remarks</li></ul>	[X] This Dala Poinl is	a Welland

Data Form Routine Wetland Determination	City	Number: 0877.008.010.0310 y: Hamilton stand Data Point: W-14-03-upl.
Project/Site: Ravalli Co. Alrport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegetation, soils, or hydrology been disturbed? [ ] Is the area a potential problem area?	Ci Si Ci Si	ate: October 28, 2004 ounty: Ravaill tate: MT ommunity ID: Upland tation ID: S-14-03 lot ID: 2
Vegetation <u>Dominant</u> Species  Herbaceous	Common Name	% Cover Indicator
Tanacetum vulgare Senecio serra Taraxacum officinale Festuca erundinacea Medicago sativa Shrub Symphoricarpos albus	Tansy,Common Groundsel,Bulterweed Dandellon,Common Fescue,Kenlucky Alfalfa Snowberry	NI FACU FACU FAC-
% Species that are OBL, FACW, or FAC (except FAC-); Remarks: Less than 50% FAC or wetter	Cowar	din Classification:
[ ] Recorded Data (describe in remarks) [ ]         [ ] Stream, Lake, or Tide Gage [ ]         [ ] Aerial Photograph [ ]         [ ] Other (describe in remarks) [ ]         Field Observations:	ry Wetland Hydrology Indicators Inundated Saturated in upper 12 inches Water marks Drift lines SedIment deposits Drainage patterns in wetlands	Secondary Hydrology Indicators  [ ] Oxidized root channels  [ ] Water-stained leaves  [ ] Local soil survey data  [ ] FAC-Neutral test  [ ] Other (explain in remarks)
Soils  Depth Hor. Matrix Mottle / 2nd Mottle (In.) Cotor Color Ab  0-16 A 10YR 3/2		ire, ture, etc. y Clay Loam Medium Subangular Blocky
Hydric Soils Indicators  [ ] Histosol  [ ] Histic Epipedon  [ ] Sulfildic Odor  [ ] Probable Aquatic Moist Regime  [ ] Reducing Conditions  [ ] Gleyed or Low-Chroma Colors	[ ] Concretions [ ] High Organic % In Surfa [ ] Organic Streaking [ ] Listed on Local Hydric S [ ] Listed on National Hydri [ ] Other (explain in remark	Soils List ic Sails List
Unit Name: B3f Burnt Fork Loam, Level Drainage Class: Well Drained	Taxonomy: Aridic Haploboro [ ] Field Observations match	
Remarks		
Wetland Determination	f amus must be a	a
[ ] Hydrophytic Vegetation Present [ ] Hydric Soils Present [ ] Wetland Hydrology Present Remarks	[ ] This Data Point is a We	uland

Data Form Routine Wetland Determination		Job Number: 0877.008.010.03 City: Hamilton Welland Data Point: W-15-04	
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator:  [X] Do normal circumstances exist on the site?  [] Have vegetation, soils, or hydrology been disturbed.  [] Is the area a potential problem area?	d?	Date: October 27, 2004 County: Ravalil State: MT Community ID: Wetland Station ID: S-15-04 Ptol ID: 1	
Vegetation Dominant Species	Common Name	% Cover	Indicator
Herbaceous  Juncus balticus  Veronica americana Conium maculatum Dactylis glomerata Tanacetum vulgare Equisetum ervense Rumex crispus Glyceria grandis Carex rostrata  Species that are OBL, FACW, or FAC (except FACREMARKS: Greater than 50% FAC or wetter	Rush,Baltic Speedwell,American Polson-Hemlock Grass,Orchard Tansy,Common Horsetail,Field Dock,Curly Grass,American Manna Sedge,Beaked ): C	owardin Classification:	FACW+ OBL FAC+ FACU NI FAC FAC+ No status OBL
[ ] Recorded Data (describe in remarks) [         [ ] Stream, Lake, or Tide Gage [         [ ] Aerial Photograph [         [ ] Olher (describe in remarks) [  Field Observations:	nary Welland Hydrology Indicate I Inundated Saturated in upper 12 Inches Water marks Drift lines Sediment deposits The Drainage patterns in welland	[ ] Oxidized root of s [ ] Water-stained [ ] Local soil survi [X ] FAC-Neutral to [ ] Other (explain	channels leaves ey data est
Remarks Ditch			
Soils		<del></del>	
Depth Hor. Matrix Mottle / 2nd Mottle (in.) Color Color A 0-16 A 10YR 2/1	Abundance <u>Contrast</u> S	Fexture, St <u>ructure, etc.,</u> Sandy Loam Medium Subangula	r Blocky
Hydric Soils Indicators  [ ] Histosol  [ ] Histic Epipedon  [ ] Sulfidic Odor  [ ] Probable Aquatic Moist Regime  [ ] Reducing Conditions  [X] Gleyed or Low-Chroma Colors	[ ] Concretions [ ] High Organic % in s [ ] Organic Streaking [ ] Listed on Local Hyo [ ] Listed on National I [ ] Other (explain in re	dric Soils List Hydric Soils List	
Unit Name: Rm Riverside cobbly sandy loam slop Drainage Class: Excessively drained	ping Taxonomy: Entic Haplob		
Remarks			
Wetland Determination			
[X] Hydrophytic Vegetallon Present [X] Hydric Soils Present [X] Wetland Hydrology Present Remarks	[X] This Data Point is a	Welland	

Data Form Routine Wetland Determination	City:	Number: 0877.008.010.0310 Hamilton and Data Point: W-15-04-upi.
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegetation, soils, or hydrology been disturt [ ] Is the area a potential problem area?	Cor Sla Cor ped? Sla	e: October 27, 2004 unty: RavallI te: MT nmunity ID: Upland tion ID: S-15-04
Vegetation		
Dominant Species Herbaceous	Common Name	% Cover Indicator
Tanacetum vulgare Centaurea maculosa <u>Dactylis glomerata</u> % Species that are OBL, FACW, or FAC (except FA Remarks: Less than 50% FAC or wetter	Tansy,Common Knapweed, Spotled Grass,Orchard C-): Cowardi	NI No Status FACU n Classification:
, and the second		
Hydrology  [ ] Recorded Data (describe in remarks)  [ ] Stream, Lake, or Tide Gage  [ ] Aerial Photograph  [ ] Other (describe in remarks)  Fleid Observations:  Depth of Surface Water(in.): 0  Depth to Free Water in Pit(in.): >16  Depth to Saturated Solis(in.): >16  Remarks	rimary Wetland Hydrology Indicators [ ] Inundated [ ] Saturated In upper 12 Inches [ ] Water marks [ ] Drift lines [ ] Sediment deposits [ ] Drainage patterns in wetlands	Secondary Hydrology Indicators  { ] Oxidized root channels  [ ] Water-stained leaves  [ ] Local soil survey data  [ ] FAC-Neutral test  [ ] Other (explain in remarks)
Soils		
Depth Hor. Matrix   Motite / 2nd Motite (In.)   Color   Colo	Abundance Contrast Structur	•
Hydric Solls Indicators  [ ] Histosol [ ] Histic Epipedon [ ] Sulfidic Odor [ ] Probable Aqualic Molst Regime [ ] Reducing Conditions [ ] Gleyed or Low-Chroma Colors	[ ] Concretions [ ] High Organic % in Surface [ ] Organic Streaking [ ] Listed on Local Hydric So [ ] Listed on National Hydric [ ] Other (explain in remarks)	lis List Soils List
Unit Name: Rm Riverside cobbly sandy loam si Drainage Class: Excessively drained	oping Taxonomy: Entic Haploborolls [ ] Field Observations match ma	
Remarks		•
Wetland Determination		
[ ] Hydrophytic Vegetation Present [ ] Hydric Soils Present [ ] Wetland Hydrology Present Remarks	[ ] This Data Point is a Wetla	and

Data Form Routine Wetland Determination		Job Number: 0877.008.010.0310 City: Hamilton Wetland Dala Point: W-16-04-wi.
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegetation, soils, or hydrology been disturbed [ ] Is the area a potential problem area?	?	Date: October 27, 2004 County: Ravalli State: MT Community ID: Wetland Station ID: S-16-04 Plot ID: 1
Vegetation		
Dominant Species Herbaceous	Common Name	% Cover_Indicator
Typha angustifolia Equisetum leevigatum Juncus balticus Deschempsia cespitose Poa palustris Carex nebrescensis % Species that are OBL, FACW, or FAC (except FAC-) Remarks: Greater than 50% FAC or wetter	Cattail,Narrow-Leaf Scouring-Rush,Smooth Rush,Baltic Halrgrass,Tufted Bluegrass,Fowl Sedge,Nebraska	OBL FACW FACW+ FACW FAC OBL Owardin Classification:
Hydrology Prim	ary Welland Hydrology Indicato	ors Sacondary Hydrology Indicators
[ ] Recorded Data (describe in remarks) [         [ ] Stream, Lake, or Tide Gage [)         [ ] Aerial Photograph [         [ ] Other (describe in remarks) [         Field Observations:	] Inundated [] Saturated in upper 12 inches ] Water marks ] Drift lines ] Sediment deposits ] Drainage patterns in wetland	[X] Oxidized rool channels [ ] Water-stained leaves [ ] Local soil survey data [X] FAC-Neutral test [ ] Other (explain in remarks)
Soils		
Depth Hor. Matrix Mottle / 2nd Mottle		exture,
(in.) Color Color A 0-16 A 10YR 3/1		Structure, etc. Sandy Clay Loam Fine Subangular Blocky
Hydric Soils Indicators  [ ] Histosol [ ] Histic Epipedon [ ] Sulfidic Odor [ ] Probable Aquatic Moist Regime [ ] Reducing Conditions [X] Gleyed or Low-Chroma Colors  Unit Name:C3t Corvallis slit loam moderately salin Drainage Class: Poorly drained  Remarks	[ ] Concretions [ ] High Organic % In S [ ] Organic Streaking [ ] Listed on Local Hyd [ ] Listed on National H [ ] Other (explain In red e Taxonomy: Fluvaquentic [ ] Field Observations ma	iric Solls List Hydric Solls List marks) : Haploborolls
remars		
Wetland Determination		
<ul><li>[X] Hydrophytic Vegetation Present</li><li>[X] Hydric Solls Present</li><li>[X] Wetland Hydrology Present</li></ul>	(X) This Data Point is a	Wetfand

Data Form Routine Wetland Determination		Job Number: 0877.008.010.0310 Clty: Hamilton Welland Data Point: W-16-04-upl.
Project/Sile: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the alte? [ ] Have vegetation, soils, or hydrology been distu [ ] Is the area a potential problem area?	ribed?	Date: October 27, 2004 County: RavallI State: MT Community ID: Upland Station ID: S-16-04 Plot ID: 2
Vegetation		
Dominant Species	Common Name	% Cover Indicator
Herbaceous Sisymbrium altissimum Poe palustris Equisetum leevigatum Shrub Rosa woodsii % Species that are OBL, FACW, or FAC (except F. Remarks: Less than 50% FAC or welter	Tumble-mustard Bluegrass,Fowl Scouring-Rush,Smooth Rose,Woods  AC-):	NI FAC FACW FACU owardin Classification:
Hydrology  [ ] Recorded Data (describe in remarks)  [ ] Stream, Lake, or Tide Gage  [ ] Aerial Photograph  [ ] Other (describe in remarks)  Field Observations:  Depth of Surface Water(in.): 0  Depth to Free Water in Pit(in.): >16  Depth to Saturated Solls(in.): >16  Remarks	Primary Welland Hydrology Indicate [ ] Inundated [ ] Saturated in upper 12 Inches [ ] Water marks [ ] Drift lines [ ] Sediment deposits [ ] Drainage patterns in welland	[ ] Oxidized root channels [ ] Water-stained leaves [ ] Local soll survey data [ ] FAC-Neutral test [ ] Other (explain in remarks)
Soils  Depth Hor. Malrix (in.) Color Color	Abundance Contrast S	Fexture, Structure, etc.
Hydric Soils Indicators  [ ] Histosol [ ] Histosol [ ] Sulfidic Odor [ ] Probable Aquatic Molst Regime [ ] Reducing Conditions [ ] Gleyed or Low-Chroma Colors  Unit Name: C3t Corvells silt loam moderately Drainage Class: Poorly drained  Remarks	[ ] Concretions [ ] High Organic % in a graph of the control of th	dric Soils List Hydric Soils List Imarks) : Haploborolis
Wetland Determination  [ ] Hydrophytic Vegetation Present [ ] Hydric Soils Present [ ] Wetland Hydrology Present Remarks	[ ] This Data Point is a	a Welland

Data Form Routine Wetland Determination		City: Hamilton Welland Data Point: W-17-04-wl.
Project/Site: RavallI Co. Airport Applicant/Owner: RavallI County Investigator: SR/EN  [X] Do normal circumstances exist on the site?  [ ] Have vegetation, soils, or hydrology been disturbed?  [ ] Is the area a potential problem area?		Date: October 27, 2004 County: Ravaili State: MT Community ID: Wetland Station ID: S-17-04 Plot ID: 1
Vegetation  Dominant Species	Common Name	. % Cover Indicator
Herbaceous Juncus balticus Carex microptera Deschampsia cespilosa Poa palustris Carex nebrascensis % Species that are OBL, FACW, or FAC (except FAC-): Remarks: Greater than 50% FAC or wetter	Rush,Baltic Sedge,Small-Wing Hairgrass,Tufted Bluegrass,Fowl Sedge,Nebraska	FACW+ FAC FACW FAC FAC OBL Owardin Classification:
[ ] Recorded Data (describe in remarks) [ ]         [ ] Stream, Lake, or Tide Gage [X]         [ ] Aerial Photograph [ ]         [ ] Other (describe in remarks) [ ]         Field Observations:	ry Wetland Hydrology Indicated Inundated Saturated in upper 12 Inches Water marks Drift lines Sediment deposits Drainage patterns in wetland:	[ ] Oxidized root channels [ ] Water-stained leaves [ ] Local soll survey data [X] FAC-Neutral test [ ] Other (explain in remarks)
Soils           Depth (in.)         Hor. Matrix (in.)         Mottle / 2nd Mottle (2nd Mottle (	undance Contrast S	exture, tructure, etc. ine Sandy Loam Fine Subangular Blocky
Hydric Soils Indicators  [ ] Histosol   [ ] Histic Epipedon   [X] Sulfidic Odor   [ ] Probable Aquatic Molst Regime   [ ] Reducing Conditions   [X] Gleyed or Low-Chroma Colors  Unit Name: C3s Corvallis sit loam slightly saline Drainage Class: Somewhat poorly drained	[ ] Concretions [ ] High Organic % In S [ ] Organic Streaking [ ] Listed on Local Hyd [ ] Listed on National H [ ] Other (explain in rer Taxonomy: Fluvauqentic [ ] Field Observations mal	Surface Layer ric Soils List iydric Soils List marks) Haploborolls
Remarks		
Wetland Determination  [X] Hydrophylic Vegelation Present  [X] Hydric Soils Present  [X] Wetland Hydrology Present	[X] This Data Point is a	Wetland

Data Form Routine Wetland Determination	C	ob Number: 0877.008.010.0310 City: Hamilton Velland Data Point: W-17-04-up1.
Project/Site: Ravalii Co. Airport Applicant/Owner: Ravalii County Investigator: SR/EN [X] Do normal circumstances exist on the site [ ] Have vegetation, soils, or hydrology been [ ] Is the area a potential problem area?	? disturbed?	Date: October 27, 2004 County: Ravalli State: MT Community ID: Upland Station ID: S-17-04 Plot ID: 2
Vegetation <u>Dominant Species</u>	Common Name	. % Cover Indicator
Onopordum acanthium Carduus nutans	scotch thistle musk thistle unknown grass spp.	No status No status
Lactuca serriola Terexecum officinale Shrub	Lettuce,Prickly Dandelion,Common	FACU FACU
Rosa woodsii % Species that are OBL, FACW, or FAC (exc. Remarks: Less than 50% FAC or weller	Rose, Woods ept FAC-): Cow	rardin Classification:
Hydrology  [ ] Recorded Data (describe in remarks)  [ ] Stream, Lake, or Tide Gage  [ ] Aerial Photograph  [ ] Other (describe in remarks)  Field Observations:  Depth of Surface Water(in.): 0  Depth to Free Water in Pit(in.): >16  Depth to Saturated Soils(in.): >16  Remarks	Primary Welland Hydrology Indicators  [ ] Inundated         [ ] Saturated in upper 12 inches         [ ] Water marks         [ ] Drift lines         [ ] SedIment deposits         [ ] Drainage pattems in wellands	Secondary Hydrology Indicators  [ ] Oxidized root channels  [ ] Water-stained leaves  [ ] Local soll survey data  [ ] FAC-Neutral test  [ ] Other (explain In remarks)
Soils  Depth Hor. Matrix Mottle / 2r (in.) Color Color 0-16 A 10YR 3/2	Abundance Contrast Stru	dure, ucture, etc. ndy Loam Coarse Subangular Blocky
Hydric Soils Indicators  [ ] Histosol [ ] Histosol [ ] Sulfidic Epipedon [ ] Sulfidic Odor [ ] Probable Aqualic Moist Regime [ ] Reducing Conditions [ ] Gleyed or Low-Chroma Colors Unit Name: C3s Corvalits stit loam slightle Drainage Class: Somewhat poorly drained	,	c Soils List dric Soils List arks) aploborolls
Wetland Determination  [ ] Hydrophytic Vegetation Present [ ] Hydric Soils Present [ ] Welland Hydrology Present Remarks	[ ] This Data Point is a W	Velland

Data Form Routine Wetland Determination		Job Number: 0877.008.010.0310 City: Hamilton Welland Dala Point: W-18-04-wl.
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegelation, solls, or hydrology been distured by the site of the site? [ ] Is the area a potential problem area?	rbed?	Date: October 28, 2004 County: Ravalli State: MT Community ID: Wetland Station ID: S-18-04 Plot ID: 1
Vegetation Dominant Species	Common Name	M. G
Herbaceous	OUIIIIOII Mallie	% Cover Indicator
Trifolium spp. Deschampsla cespilosa Juncus ballicus Equisetum laevigatum % Species that are OBL, FACW, or FAC (except FARM) Remarks: Greater than 50% FAC or wetter	Clover <b>spp.</b> Hairgrass, <b>Tufted</b> Rush,Baltic Scouring-Rush,Smooth C	NI, FACW+-UPL FACW FACW+ FACW Cowardin Classification:
Hydrology	Primary Wetland Hydrology Indicat	ors Secondary Hydrology Indicators
[ ] Recorded Data (describe in remarks) [ ] Siream, Lake, or Tide Gage [ ] Aerial Photograph [ ] Other (describe in remarks)	[ ] Inundated [X] Saturated in upper 12 inches [ ] Water marks [ ] Drift lines [ ] Sediment deposits	[ ] Oxidized root channels
Field Observations:  Depth of Surface Water(in.): 0  Depth to Free Water in Pit(in.): >16  Depth to Saturated Soils(in.): 0  Remarks	[X] Drainage patterns in wetland	
Soils		
Depth (in.)         Hor. Matrix Color         Mottle / 2nd Mo Color           0-4         A 10YR 2/1	Abundance Contrast	Fexture, Structure, etc. Sandy Clay Loam Medium Subangular Blocky
4-16 A 10YR 3/1		Sandy Loam Fine Subangular Blocky
Hydric Soils Indicators  [ ] Histosol  [ ] Histic Epipedon  [ ] Sulfidic Odor  [ ] Probable Aquatic Moist Regime  [ ] Reducing Conditions  [X] Gleyed or Low-Chroma Colors	[ ] Concretions [ ] High Organic % in [ [ ] Conganic Streaking [ ] Listed on Local Hyo [ ] Listed on National [ ] Other (explain in re	dric Soils List Hydric Soils List
Unit Name: C3s Corvallis silt loam slightly sall Drainage Class: Somewhat poorly drained	Ine Taxonomy: Fluvauqentio [ ] Fleid Observations ma	
Remarks		
Wetland Determination		
<ul><li>[X] Hydrophylic Vegelation Present</li><li>[X] Hydric Soils Present</li><li>[X] Wetland Hydrology Present</li><li>Remarks</li></ul>	[X] This Data Point is a	a Welland

Data Form Routine Wetland Determination		Job Number: 0877.008.010.0310 City: Hamilton Wetland Data Point: W-18-04-upl.
Project/Site: Ravalli Co. Airport Applicant/Owner: Ravalli County Investigator: SR/EN [X] Do normal circumstances exist on the site? [ ] Have vegetation, soils, or hydrology been disturt [ ] Is the area a potential problem area?	ped?	Dale: October 28, 2004 County: Ravalli State: MT Community ID: Upland Station ID: S-18-04 Plot ID: 2
Vegetation  Dominant Species  Herbaceous	Common Name	% Cover Indicator
Aster spp. Equisetum laevigatum Lactuca serriola Carduus nutans Agropyron trachycaulum % Species that are OBL, FACW, or FAC (except FA Remarks: Less than 50% FAC or wetter	Asler spp. Scouring-Rush,Smooth Lettuce,Prickly Musk thistle Wheatgrass, Slender C-):	NI, OBL-UPL FACW FACU No status FAC owardin Classification:
Property of the content of the con	rimary Wetland Hydrology Indicati [ ] Inundated [ ] Saturated in upper 12 Inches [ ] Water marks [ ] Orift lines [ ] Sediment deposits [ ] Drainage patterns in wetland	[ ] Oxidized root channels [ ] Water-stained leaves [ ] Local soil survey data [ ] FAC-Neutral test [ ] Other (explain in remarks)
Solls		
Depth Hor. Matrix   Mottle / 2nd Mottle   (In.)   Color   Color	Abundance Contrast S	exture, Structure, etc. Xay Loam Medium Subangular Blocky
Hydric Soils Indicators  [ ] Histosol [ ] Histic Epipedon [ ] Suffidic Odor [ ] Probable Aquatic Molst Regime [ ] Reducing Conditions [ ] Gleyed or Low-Chroma Colors	[ ] Concretions [ ] High Organic % in a control of the control of	dric Solla List Hydric Soila List
Unit Name: C3s Corvallis silt loam slightly salin Drainage Class: Somewhat poorly drained	Taxonomy: Fluvauqentii [ ] Field Observations ma	
Remarks		
Wetland Determination  [ ] Hydrophytic Vegetation Present [ ] Hydric Soils Present [ ] Wetland Hydrology Present Remarks	[ ] This Data Point is a	Welland

## **APPENDIX B**

Ravalli County Airport
Wetland Delineation Report Photographs



Photo 1. View northwest of wetland W-1-03.



Photo 2. View east of upland associated with W-1-03.



Photo 3. View southwest of wetland W-2-03.



Photo 4. View northwest of upland associated with W-2-03.



Photo 5. View northeast at wetland W-3-03.



Photo 6. View east of upland area associated with W-3-03.



Photo 7. View east of W-4-03, Gird Creek.



Photo 8. View west of W-4-03 and associated upland vegetation.



Photo 9. View north at W-5-03 and associated upland vegetation.



Photo 10. View south of upland vegetation associated with W-6-03 and W-7-03.



Photo 11. View north of W-9-03 and transition to upland vegetation.

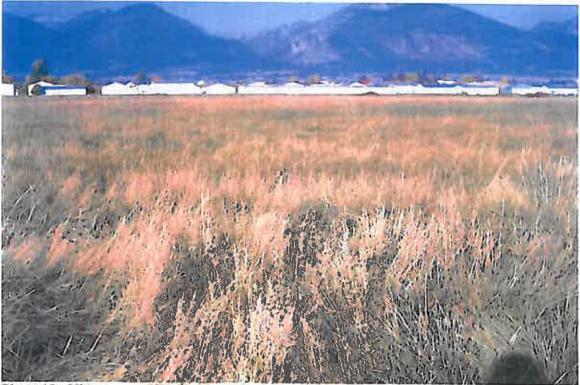


Photo 12. View west of W-10-03, wetland vegetation.



Photo 13. View northeast of upland vegetation associated with W-10-03.



Photo 14. View west of W-11-03, wetland vegetation.



Photo 15. View northeast of upland vegetation associated with W-12-03.



Photo 16. View southeast of upland vegetation associated with W-13-03.



Photo 17. View west of upland vegetation associated with W-14-03.



Photo 18. View north of S-15-04 1, wetland data point.



Photo 19. View north of S-15-04 2, upland data point.



Photo 20. View west of S-16-04 1, wetland data point.



Photo 21. View north of S-16-04 2, upland data point.



Photo 22. View north of S-17-04 1, wetland data point.



Photo 23. View east of S-17-04 2, upland data point.



Photo 24. View west of S-18-04 1, wetland data point.



Photo 25. View south of S-18-04 2, upland data point.





## U.S. ARMY CORPS OF ENGINEERS

HELENA REGULATORY OFFICE 10 WEST 15TH STREET, SUITE 2200 HELENA, MONTANA 69626

RECESSES 770 2 9 2005

REPLY TO ATTENTION OF:

April 27, 2005

Helena Regulatory Office Phone (406) 441-1375 Fax (406) 441-1380

RE: Ravalli County Airport – Jurisdiction Determination

Corps File No. 200490554

Morrison-Maierle, Inc. Attn: Mr. Paul McGuire P.O. Box 1113 Bozeman, Montana 59771

Dear Mr. McGuire:

Reference is made to your request for a verification of wetland boundaries and a jurisdictional determination for the wetlands located within the Ravalli County Airport's proposed expansion area. The airport is located near Hamilton in Sections 20,29, Township 6 North, Range 20 West, Ravalli County, Montana.

Under the authority of Section 404 of the Clean Water Act, Department of the Army permits are required for the discharge of fill material into waters of the United States. Waters of the United States include the area below the ordinary high water mark of stream channels and lakes or ponds connected to the tributary system, and wetlands adjacent to these waters. In certain circumstances, isolated waters and man-made channels may also be considered waters of the United States and would be required to be evaluated on a case-by-case basis.

Based on the information provided and a subsequent field visit conducted on April 18, 2005 by Robert McInerney of our office, the site contained jurisdictional waters of the U.S. under the authority of Section 404 of the Clean Water Act. The enclosed Jurisdictional Determination (JD) form describes the extent of waters of the United States on the project site. This is an Approved Jurisdictional Determination, and it is valid for a period of 5 years from the date of this letter unless new information warrants revision of the determination before the expiration date. If you disagree with this jurisdictional determination, you have the right to appeal the decision. If you would like more information on the jurisdictional appeal process, contact this office.

From a further review of wetlands designated W-6-03, W-7-03, W-9-03, and W-10-03, it has been determined that they are jurisdictional based on being historic channels that meet the wetland criteria.

If you have any questions, please call Robert McInemey of this office at (406) 441-1375, and reference File No. 200490554.

Allan Steinle

Montana Program Manager

Enclosures

DISTRICT OFFICE: Omaha FILE NUMBER: 200490554 PROJECT LOCATION INFORMATION: State: Montana County: Ravalli Center coordinates of site (latitude/longitude): Approximate size of area (parcel) reviewed, including uplands: Name of nearest waterway: Gird Creek Name of watershed: Bitterroot JURISDICTIONAL DETERMINATION Completed: Desktop determination X Date: 26 April 2005 Site visit(s) X Date(s): 18 April 2005 Jurisdictional Determination (JD): Preliminary JD - Based on available information, [] there appear to be (or) [] there appear to be no "waters of the United States" and/or "navigable waters of the United States" on the project site. A preliminary JD is not appealable (Reference 33 CFR part 331). Approved JD - An approved JD is an appealable action (Reference 33 CFR part 331). Check all that apply: There are "navigable waters of the United States" (as defined by 33 CFR part 329 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: [X] There are "waters of the United States" (as defined by 33 CFR part 328 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: 45.97 acres. ☐ There are "isolated, non-navigable, intra-state waters or wetlands" within the reviewed area. Decision supported by SWANCC/Migratory Bird Rule Information Sheet for Determination of No Jurisdiction. BASIS OF JURISDICTIONAL DETERMINATION: A. Waters defined under 33 CFR part 329 as "navigable waters of the United States": The presence of waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. B. Waters defined under 33 CFR part 328.3(a) as "waters of the United States": [1] The presence of waters, which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide. (2) The presence of interstate waters including interstate wetlands1. (3) The presence of other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate commerce including any such waters (check all that apply): (i) which are or could be used by interstate or foreign travelers for recreational or other purposes. (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. (iii) which are or could be used for industrial purposes by industries in interstate commerce. (4) Impoundments of waters otherwise defined as waters of the US.

Rationale for the Basis of Jurisdictional Determination (applies to any boxes checked above). If the jurisdictional water or wetland is not itself a navigable water of the United States, describe connection(s) to the downstream navigable waters. If B(1) or B(3) is used as the Basis of Jurisdiction, document navigability and/or interstate commerce connection (i.e., discuss site conditions, including why the waterbody is navigable and/or how the destruction of the waterbody could affect interstate or foreign commerce). If B(2, 4, 5 or 6) is used as the Basis of Jurisdiction, document the rationale used to make the determination. If B(7) is used as the Basis of Jurisdiction, document the rationale used to make adjacency determination: Gird Creek drains into the Bitterrool River which flows to the Clark Fork which in turns flows to Idaho and eventually into the Columbia River, a Section 10 navigable water.

(7) The presence of wetlands adjacent to other waters of the US, except for those wetlands adjacent to other wetlands.

(5) The presence of a tributary to a water identified in (1) - (4) above.

(6) The presence of territorial seas.

Late	cral Extent of Jurisdiction: (Reference: 33 CFR parts 328 and 329)  Ordinary High Water Mark indicated by:  clear, natural line impressed on the bank the presence of litter and debris changes in the character of soil destruction of terrestrial vegetation shelving other:  High Tide Line indicated by: oil or seum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gages other:
L	Mean High Water Mark indicated by:  ☐ survey to available datum; ☐ physical markings; ☐ vegetation lines/changes in vegetation types.
⊠ W M	Vetland boundaries, as shown on the attached wetland delineation map and/or in a delineation report prepared by:
Basis I The Ur	For Not Asserting Jurisdiction: he reviewed area consists entirely of uplands. hable to confirm the presence of waters in 33 CFR part 328(a)(1, 2, or 4-7). headquarters declined to approve jurisdiction on the basis of 33 CFR part 328.3(a)(3). he Corps has made a case-specific determination that the following waters present on the site are not Waters of the Vaste treatment systems, including treatment ponds or lagoons, pursuant to 33 CFR part 328.3.  Artificially irrigated areas, which would revert to upland if the irrigation ceased.  Artificial lakes and ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.  Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.  Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for abandoned and the resulting body of water meets the definition of waters of the United States found at 33 CFR lagolated, intrastate wetland with no nexus to interstate commerce.  Prior converted cropland, as determined by the Natural Resources Conservation Service. Explain rationale:  Non-tidal drainage or irrigation ditches excavated on dry land. Explain rationale:
DATA REVIEWED FOR JURSIDICTIONAL DETERMINATION (mark all that apply):    Maps, plans, plots or plat submitted by or on behalf of the applicant.   Data sheets prepared/submitted by or on behalf of the applicant.   This office concurs with the delineation report, dated February 2005, prepared by (company): Morrison-Maierle   Data sheets prepared by the Corps   Corps' navigable waters' studies:   U.S. Geological Survey Hydrologic Atlas:   U.S. Geological Survey 7.5 Minute Topographic maps:   U.S. Geological Survey 7.5 Minute Historic quadrangles:   U.S. Geological Survey 15 Minute Historic quadrangles:   U.S. Geological Survey 15 Minute Historic quadrangles:   U.S. Autural Resources Conservation Service Soil Survey:   National wetlands inventory maps:   State/Local wetland inventory maps:   FEMA/FIRM maps (Map Name & Date):   100-year Floodplain Elevation is: (NGVD)   Aerial Photographs (Name & Date):   Other photographs (Name & Date):   Advanced Identification Wetland maps:   Site visit/determination conducted on: April 18, 2005   Applicable/supporting case law:   Other information (please specify):	

Wetlands are identified and delineated using the methods and criteria established in the Corps Wetland Delineation Manual (87 Manual) (i.e., occurrence of hydrophytic vegetation, hydric soils and wetland hydrology).

The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, and the like are also adjacent.